

DISTILLATION

TREATISE

OF THE
Choicest Spagiricall PREPARATION
Performed by way of DISTILLATION

Together with the Description of the
Chiefeft FURNACES & VESSELS
Used by Ancient and Moderne CHYMISTS.

M L S O;

A Discourse of divers *Spagiricall Experiments* and *Curiosities*
And the Anatomy of GOLD and SILVER, with the
Chiefeft Preparations and *Curiosities* thereof; together with their *Uses*.

All which are contained in VI. BOOKES

Composed by. JOHN FRENCH Dr. of Physick.

THE SECOND EDITION

To which is added, The

LONDON-DISTILLER

Exactly and truly shewing the way (in words
at length; and not in mysterious *Characters* and
Figures) to DRAW all Sorts of

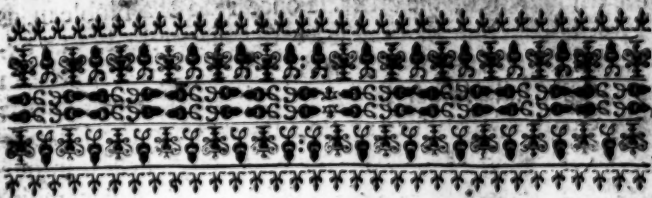
SPIRITS and STRONG-WATERS

To which is added their VERTUES

With the Additions of other Excellencies

LONDON, Printed by E. Cotes, for Thomas Baskett, at the
the BIBLE in Little-britain with





To my much honoured friend

TOBIAS GARBRAND,

Doctor of Physick, and Prin-

cipall of *Gloucester-hall*, in

OXFORD.

SIR!



T is my ambition to let the world know upon what score it is that I do especially honour men. It is not Sir! as they are high born Heirs of the great Potentates, for which most honour them (and upon which account I also shall not deny them their due) but as they excell in honesty; and are friends to Art. That poor Philosophers should take no delight in riches, and rich men should take great delight in Philosophy, is to me an argument, that there

The Epistle Dedicatory.

is more delight, honor, and satisfaction in the one then in the enjoyment of the other. I once read of a Noble mans Porter that let in all that were rich apparelled, but excluded a poor Philosopher: but I should, if I had been in his place, have rather let in the Philosopher without the gay cloathes, then the gay cloathes without the Philosopher. As long as I have sense or reason, I shall improve them to the honour of Art, especially that of Alchymie. In the perfection thereof there are riches, honour, health, and length of dayes: by it *Artesius* lived 1000. years, *Flammell* built 28 Hospitalls with large revenues to them, besides Churches and Chappels; for it; both they and divers more were accounted Philosophers, and wise men, which sounds more honourable in my eares then all the ratling and empty titles of honour whatsoever besides. In the perfection of this Art, I mean the accomplishing of the Elixir, is the Sulphur of Philosophers set at liberty, which gratifies the releasers thereof with three Kingdomes, *viz.* Vegetable, Animall, and Minerall, and what cannot they do, and how honourable are they, that have the command of these? They may command Lead into Gold, dying plants into fruitfulnessse, the sick into health, old age into youth, darknesse into light, and what not: A month would fail to give you an account of their power and dominations. Now for the effecting of this I shall besides what I have advised in the Epistle to the Reader, say only this; Court the Mother, and you winne the Daughter, prevail with Nature, and the fair *Diana* of the Philosophers is at your service.

Now if you cannot prevaile with Nature for the fairest of her daughters, *viz.* the Mercury of Philosophers, yet she hath other Daughters of wonderfull beauty also, as

are

Epistle Dedicatory.

are the *Essences* and *Magisteries* of Philosophers, which also are endowed with riches, honour, and health; and any of these you may more easily prevail with their mother Nature for. This Art of Alchymie is that *Salary* Art, which is more noble then all the other six Arts, and Sciences, and if it did once thoroughly shine forth out of the clouds whereby it is eclipsed, would darken all the rest, (as the Sun doth the other six planets) or at least swallow up their light. This is that true naturall Philosophy which most accurately anatomizeth Nature and naturall things, and ocularly demonstrates the principles and operations of them. That empty naturall philosophy which is read in the Universities, is scarce the meanest hand-maid to this Queen of Arts. It is pity there is such great encouragement for many empty and unprofitable Arts, and none for this, and such like ingenuities, which if promoted would render an University far more flourishing then the former. I once read or heard of a famous University beyond Sea, that was fallen into decay, through what cause I know not: but there was a generall councill held by the learned, how to restore it to its primitive glory. The *Medium* at last agreed upon was the promoting of Alchymie, and encouraging the Artists themselves. But I never expect to see such rational actings in this Nation, till shadows vanish, substances flourish, and truth prevail: which time I hope is at hand and desired by all true Artists, and to my knowledge, especially by your self, upon which account I truly honour you. Now to your selfe therefore I crave leave to adumbrate something of that Art which I know you will be willing for the publick good to promote. I dedicate this Treatise to you, not that it is
worthy

The Epistle Dedicatory.

worthy your acceptance, but that it may receive worth
by your accepting of it. I present it to you (as men
bring lead to Philosophers to be tinged into gold) to
receive the stamp of your favour, and approbation, that
it may pass current, with acceptance amongst the sons
of Art, whereby you will continue to oblige him
who is

London,
Nov. 25.
1650.

SIR,

Your most obliged Servant,

JOHN FRENCH.

To the Reader.

Here is a glut of Chymicall books, but a scarcity of Chymicall truthes: Nature and Art affords variety of Spagyricall preparations, but they are as yet partly undiscovered, partly dispersed in many books and those of divers Languages, and partly reserved in private mens hands. When therefore I considered what need there is of, and how acceptable a generall treatise of Distillations might be, especially to our English Nation (and the rather since Baker upon Distillations is by reason of the description of a few furnaces and vessels therein, besides which there is small variety either of preparations, or curiosities, sold at such a high rate) I thought I could do them no better service then to present them with such a treatise of that subject, which should contain in it the choicest preparations of the selectest Authors both ancient and moderne, and those of severall languages, and which I have attained by my own long, and manuell experience, together with such as I have by way of exchange purchased out of the hands of private men, which they had monopolized as great secrets. But on the other hand when I considered what a multitude of Artists there are in this Nation, from many of which more and better things might be expected then from my self, I was at a nonplus in my resolutions, fearing it might be accounted an unpardonable presumption in me to undertake that which might be better performed by others. But for the avoiding of this aspersion, be pleased to understand that I present not this to the world under any other notion then of a rough draught (which indeed is the worke of the more unskilfull, and therefore of my self, without exception) to be polished by
the

To the Reader.

the more expert Artift. I rejoyce as at the break of the day after a long tedious night, to see how this solary art of Alchymie begins for to shine forth out of the clouds of reproach which it hath a long time undeservedly layen under. There are two things which have a long time eclipsed it, viz. the mists of ignorance, and the specious lunny body of deceit. Arise O Sun of truth, and dispell these interposed fogs, that the Queen of Arts may triumph in splendour! If men did beleieve what this Art could effect, and what variety there is in it, they would be no longer straightened by, nor bound up to or jurare in verba Galeni, vel Aristotelis, but would now subscribe a new engagement to be true and faithfull to the principles of Helmes, and Paracellus, as they stand established without Aristotle their prince, and Galen, and Hippecrates, their lords and masters. They would no longer stand dreaming forth, Sic dicit Galenus, but Ipse dixit Hermes. I desire not to be mistaken as if I did deny Galen his due, or Hippecrates what is his right, for indeed they wrote excellently in many things, and deserved well thereby; That which I cannot allow of in them is their strict observation of the quadruplicity of humours (which in the schoole of Paracellus, and writings of Helmont, where the Anatomy of humours hath been most rationally and fully discussed, hath been sufficiently confuted) and their confining themselves to such crude medicines, which are more fit to be put into Spagyricall vessels for a further digestion, then into mens bodies to be fermented therein. Certainly if men were lesse ignorant they would preferre cordiall essences before crude juices, balsamick Elixirs before flegmatick waters, the Mercury of philosophers before common quicksilver. But many men have so little insight in this Art, that they scarce believe any thing in it beyond the Distilling of Waters and Oils, and extracting of Salts; nay many that pretend to Philosophy, and would

To the Reader.

be accounted Philosophers, are so unbelieving, that, as saith Sandivogius, although he would have intimated the true Art to them word by word, yet they would by no meanes understand or beleewe that there was any water in the Philosophers sea. And as he in this case, so I in another know divers that will not beleewe that common quicksilver can of it selfe be turned wholly into a transparent water, or that glasse can be reduced into sand and salt of which it was made, saying that fusio vitrificatoria est ultima fusio; or that an heare may be made to grow in two hours, and the Idea of a plant to appear in a glasse, as if the very plant it selfe were there, and this from the essence thereof, and such like preparations as these: the two former whereof may be done in half an hour, but the latter requires a longer time, but yet possible. And for the possibility of the Elixir, you shall assoon perswade them to beleewe they know nothing (which is very hard, nay an impossible thing to do) then to beleewe the possibility thereof. If there be any such thing (say they) why are not the possessors thereof infinitely rich, famous, do many miracles and cures, and live long? These Objections, especially some of them, scarce deserve an answer; yet I shall to shew the vanity of them make some reply thereunto. Did not Artelius by the help of this medicine live 1000. yeares? Did not Flammell build fourteen Hospitals in Paris besides as many in Boileigne, besides Churches, and Chappels with large renewes to them all? Did not Bacon do many miracles? and Paracelsus many miraculous cures? Besides what saith Sandivogius? I have, saith he, incurred more dangers, and difficulties by discovering my selfe to have this secret, then ever I had profit by it, and whensoever I would discover my selfe to the great Ones, it alwayes redounded to my prejudice, and danger. Can a man that carrieth alwaies about him 10000. pounds worth of Jewels and gold, travel every where up and

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downe,

To the Reader.

downe, safe, and not be robbed? Have not many rich money-mongers been tortured into a confession where their money was concealed? Did you never heare of a vapouring fellow in London, that portending to the knowledge of this Mystery was on a suddaine caught aside by money-thirsters, and by them tormented with tortures little lesse then those of hell, being forced thereby (if he had knowne it) into a discovery of it? To say nothing of being in danger of being subjected, and enslaved to the pleasure of Princes, and of becoming instrumentall to their luxury, and tyranny, as also being deprived of all liberty, as once Raimundus Lullius. The truth is, the greatest matter that Philosophers aime at, is the enjoyment of themselves, for which cause they have sequestred themselves from the world, and become Hermites: Well therefore and like a Philosopher spake Sandivogius, when he said, Beleeve me, if I were not a man of that state and condition that I am of, nothing would be more pleasant to me then a solatary life, or with Diogenes to live hid under a tub; for I see all things in this world to be but vanity, and that deceit, and covetousnesse prevail much, that all things are vendible, and that vice doth exceed vertue. I see the better things of the life to come before mine eyes, I rejoyce in these: Now I do not wonder, as before I did, why Philosophers when they have attained this medicine, have not cared to have their daies shortened, (although by the vertue of their medicine they could have prolonged them) for every Philosopher hath the life to come so clearly set before his eyes, as thy face is seen in a glasse. Thus much by way of reply to the frivolous objections of those that beleeve not the verity of this Art, and not onely so, but will not beleeve it. If you should discover to them the processe of the Philosophers stone, they would laugh at your simplicity, and I will warrant you never make use of it. Nay if you should make

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make projection before them, they would think that even in that there were a fallacy, so unbelieving are they: so I finde them, and so I leave them, and shall for ever finde them the same.

There is another sort of men by whom this Art hath been much scandalized, and they indeed have brought a great Odium upon it by carrying about, and vending their whites, and reds, their sophisticated oils, and salts, their dangerous and ill prepared Turbithes, and Aurum vitæ's. And indeed it were worth while, and I might do good service for the Nation, to discover their cheats, as their sophisticating of Chymicall oils with spirit of Turpentine, and salts with salt extracted out of any wood-ashes and such like, but here is not place for so large a discourse as this would amount to, I shall only at this time relate to you how Penotus was cheated with a sophisticated Oil of gold: for, saith he, I gave 24. duckets for the processe of an Aurum potable which was much cryed up and magnified at Prague, but at last is proved to be nothing but a mixture of oil of Camphire, Cloves, Fennel-seed, and of Vitriall tinged with the leaves of Gold. I know I shall incur the displeasure of some, but they are sophisticating, cheating mountebäcks, who indeed deserve to be bound to the pease, because many men, I dare swear, through their means go in danger of their lives. Better it is that their knavery should be detected, then a noble Art through their villany be clouded, and aspersed.

Now we must consider that there are degrees in this Art; for there is the accomplishing of the Elixir it self, and there is the discovering of many excellent essences, magisteries, and spirits, &c. which abundantly recompense the discoverers thereof with profit, health, and delight. Is not Paracelsus his Ludus that dissolves the stone, and all tartarous matter in the body into a liquor, worth finding out?

To the Reader.

Is not his Tinea Scutura a most noble medicine, that
extinguisheth all preternaturall heat in the body in a
moment: Is not his Alcahest a famous dissolvent, that
can in an instant dissolve all things into their first prin-
ciples, and mithall is a specificum against all distempers of
the liver? who would not take paines to make the quin-
tessence of honey and the Philosophicall spirit of Wine,
which are cordiall and balsamicall even to admiration?
A whole day would fail to reckon up all the excellent,
admirable rarities that by this spagyricall Art might be
brought to light, in the searching out of which, why may
not the Elixir it selfe at last be attained unto? Is it not
possible for them that passe through many Philosophicall
preparations to unfold at last the riddles, and Hierogly-
phicks of the Philosophers? or were they all meer Phan-
tasmes? Is there no fundamentum in re for this secret?
Is there no sperme in gold? Is it not possible to exalt it
for multiplication? Is there no universall spirit in the
world? Is it not possible to finde that collected in one
thing, which is dispersed in all things? What is that
which makes gold incorruptible? What induced the Philo-
sophers to examine gold for the matter of their medicine?
Was not all gold once living? Is there none of this living
gold, the matter of Philosophres, to be had? Did San-
divogius the last of knowne Philosophers spend it all?
Surely there is matter enough for Philosophers, and also
some Philosophers at this day for the matter, although
they are unknowne to us. There are, saith Sandivogius,
without doubt many men of a good conscience both
of high and low degree (I speak knowingly) that have
this medicine, and keep it secretly. If so, let no man be
discouraged in the prosecution of it, especially if he take a-
long with him the five Keyes which Nollius sets down,
which

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which indeed all Philosophers with one consent enjoyne the use and observation of.

1. Seeing it is a thing divine, and celestially, it must be sought for from above, and that not without a full resolution for a pious, and charitable improvement of it.

2. Before thou betakest thy selfe to the worke, propound to thy selfe what thou seekest for, and enter not upon the practicke till thou art first well versed in the theory, for it is much better to learn with thy braines, and imagination, then with thy hands, and costs, and especially study nature well; and see if thy proposals be agreeable to the possibility thereof.

3. Diligently read the sayings of true Philosophers, read them over again and again, and meditate on them, and take heed thou dost not read the writings of Imposters in stead of the Books of the true Philosophers. Compare their sayings with the possibility of Nature, and obscure places with cleare, and where Philosophers say they have erred doe thou beware, and consider well the generall axioms of Philosophers, and read so long till thou seest a sweet Harmony, and consent in the sayings of them.

4. Imagine not high things, but in all things imitate nature, viz. in matter; in removing what is Heterogeneous; in weight; in colour; in fire; in working; in slownesse of working; and let not thy operations be vulgar, neither thy vessels; work diligently and constantly.

5. If it be possible, acquaint thy self thoroughly with some true Philosophers. Although they will not directly discover themselves that they have this secret, yet by one circumstance or another it may be concluded how neer they are to it. Would not any rationall man that had been conversant with Bacon, and seeing him doe such miraculous things,

To the Reader.

or with Sandivogius who did intimate the Art to some word by word, have concluded that they were not ignorant of it. There have been Philosophers, and perhaps still are, that although they will not discover how it is made, yet may certify you, to the saving of a great deal of cost, pains, and time, how it is not made: and to be convinced of an error is a great step to the truth. If Ripley had been by any Tutor convinced of those many errors before he had bought his knowledge at so deare a rate, he had long before, with lesse charges attained to his blessed desire.

And as a friendly Tutor in this, so in all spagyricall preparations whatsoever, is of all things most necessary. A faithfull well experienced master will teach thee more in the mysteries of Alchymy in a quarter of a year, then by thine owne studies and chargeable operations thou shalt learn in seven yeaues. In the first place therefore, and above all things apply thy selfe to an expert, faithfull, and communicative Artist, and account it a great gain, if thou canst purchase his favour, though with a good gratuity, to lead thee through the manuell practice of the chiefeest, and choicest preparations. I said apply thy selfe to an Artist, for there is scarce any proceesse in all Chymistry so easie that he that never saw it done will be to seek, and commit some errors in the doing of it. I said expert, that he may be able to instruct thee aright, faithfull, that as he is able, so may faithfully performe what he promiseth, and communicative, that he may be free in discovering himselfe and his Art to thee. The truth is, most Artists reserve that to themselves, which they know, either out of a desire to be admired the more for their undiscovered secrets, or out of envie to others knowledge. But how far this humour is approvable in them, I leave it to others to judge, and as for my part I have here
com-

To the Reader.

communicate upon the account of a bare acceptance only what I have with many years paines, much reading, and great costs known. There is but one thing which I desire to be silent in as touching the processe thereof; as for the thing it selfe to be prepared, what it is I have elswhere in this Treatise expressed; and the preparing of that is indeed a thing worthy of any ones knowing, and which perhaps hereafter I may make known to some. I am of the same mind with Sandivogius, that that fourth Monarchy which is Northerne, ~~is during~~ in which (as the ancient Philosophers did divine) all Arts and Sciences shall flourish, and greater and more things shall be discovered then in the three former. These Monarchies the Philosophers reckon not according to the more potent, but according to the corners of the world, whereof the Northerne is the last, and indeed is no other then the golden age, in which all tyranny, oppression, envie, and covetousnesse shall cease, when there shall be one prince and one people abounding with love and mercy, and flourishing in peace: which day I earnestly expect.

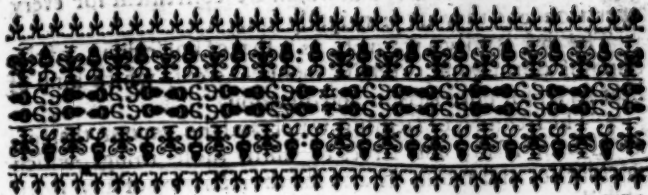
In the mean time if what I know may adde to thy experience, thou hast it freely. And if I shall see that this Treatise of Distillation passe with acceptance amongst the Artists of this Nation, I shall hereafter gratifie them for their good will with two other parts of Chymistrie, viz. Sublimation, and Calcination; and I hope this will be an occasion to set the more expert Artists on work, for the communicating their experiences to the world. One thing (courteous Reader) let me desire thee to take notice of, viz. whereas every processe is set down plain, yet all of them must be proceeded in secundum Artem Alchymistæ, (which Art indeed is obtained by experience) and therefore many that work according to the bare processe effect not what they intend;
and

To the Reader.

and the reason is, because there was some art of the Al-
chymist wanting. To conclude, if thou knowest more or
better things then these, be candid, and impart them;
(considering that I wrote these for them that know
them not) if not, accept of the endeavours of thy
Friend

JOHN FRENCH.

The



What distillation is; and the kinds thereof.



Shall not stand here to shew whence the Art of Distillation had its originall, as being a thing not easily to be proved, and if known, yet little conducing to our ensuing discourse. But let us understand what Distillation is, of which there are three principall and chief definitions, or descriptions.

1. Distillation is a certain Art of extracting the Liquor, or the humid part of things by vertue of heat (as the matter shall require) being first resolved into a vapour, and then condensed again by cold.

2. Distillation is the art of extracting the spirituall and essential humidity from the flegmatick, or of the flegmatick, from the spirituall.

3. Distillation is the changing of grosse thick bodies into a thinner and liquid substance, or separation of the pure liquor from the impure faces.

I shall treat of Distillation according to all these three acceptations, and no otherwise; hence I shall exclude Sublimation, and Calcification, which are of dry substances, unless I shall by the way make use of either in relation to the perfecting of any kind of Distillation.

Now because all, or most of these distillations are to be performed by heat, it will be necessary to understand how many degrees

degrees of heat there are, and which are convenient for every operation, and they are principally four.

The first is only a warmth, as is that of horse dung, of the Sun, of warm water, and the vapour thereof, which kind of heat serves for putrefaction, and digestion.

2. The second is of seething water, and the vapour thereof, as also of ashes, and serves to distill those things which are subtile, and moist, as also for the rectifying of any spirit or oil.

3. The third is of sand and filings of iron, which serves to distill things subtile, and dry, or grosse and moist.

4. The fourth is of a naked fire, close, open, or with a blast, which serves to distill Metalls and Minerals, and hard gummie things, as Amber, &c. I do not say serves only to distill these, for many of the former distillations are performed by this heat, as the distilling of Spirits and Oils, &c. in a copper still over a naked fire; but these may be distilled by the two former degrees of heat; but Mineralles and such like cannot but by this fourth degree alone.

Of the matter and form of Furnaces.

THe matter of Furnaces is various, for they may be made either of brick and clay, or clay alone with whites of Egges, hair, and filings of Iron, (and of these if the clay be fat are made the best, and most durable Furnaces) or of Iron, or Copper, cast or forged. The forms also of Furnaces are various.

The fittest form for Distillation is round; for so the heat of the fire being carried up equally diffuseth it self every way; which happens not in a Furnace of another figure, as four square or triangular, for the corners disperse and separate the force of the fire. Their magnitude must be such as shal be fit for the receiving of the vessel; their thicknesse so great as necessity shall seem to require, only thus much observe, that if they be made of forged iron or copper, they must be coated within side, especially if you intend to use them for a strong fire. They must be made with

BOOK I. *Of the Art of Distillation.*

two bottomes, distinguished as it were, into two forges; the one below which may receive the ashes; the other above to contain the fire. The bottom of this upper must either be an iron grate, or else an Iron-plate perforated with many holes, that so the ashes may the more easily fall down into the bottome, which otherwise would put out the fire. Yet some Furnaces have three partitions, as the Furnace for Reverberation, and the Register Furnace. In the first and lowest the ashes are received, in the second the fire is put, and in the third of the Furnace for Reverberation, the matter which is to be reverberated. This third ought to have a semi-circular cover, that so the heat may be reflected upon the contained matter. The bottome of the third and uppermost partition of the Register Furnace must be either a plate of Iron, or a smooth stone perforated with holes, having stopples of stone fitted thereunto, which you may take out or put in, as you would have the heat increased or decreased. In the top or upper part of all these Furnaces where it shal seem most fit, there must be two or three holes made, that by them the smoak may more freely pass out, and the air let in to make the fire burn the stronger if need require, or else which are to be shut with stopples made fit to them. The mouths of the fore-mentioned partitions must have shutters, just like an Ovens mouth, with which you may shut them close, or leave them open if you would have the fire burn stronger. But in defect of a Furnace, or fit matter to make one, we may use a Kettle or a Pot set upon a Trevet, as we shall shew when we come to give you a description of the Furnace and Vessels. The truth is, a good Artist will make any shift, yea and in half a dayes time make a Furnace or something equivalent to it for any operations.

Of Vessels fit for distillation.

Vessels for Distillation are of various matter and forme. For they may be either of Lead, which I altogether disapprove of, for that they turn the liquors into a white and milky substance, beside the malignity they give to them; or they may be of Copper, Iron, or Tin, which are better then the former;

mer; or of Jug-metall, or Potters-metall glazed, or Glasse which are the best of all, where they may be used without fear of breaking or melting. Some make them of silver, but they are very chargeable. They that are able and willing may have the benefit of them.

Of Lutes for coating of glasses and for Closures, as also severall wayes of stopping glasses.

THe best Lute is made thus, viz. Take of Loam and sand tempered with salt water (which keeps it from cleaving) to these adde the *Caput Mortuum*, of Vitrioll, or *Aqua fortis*, and scaling of Iron, and temper them well together, and this serveth to coat Retorts or any glasse vessels that must endure a most strong fire, and will never fail if well made. Some adde Flax, beaten Glasse, and Pots, and flint, &c.

Take unslaked Lime, and Linseed oil, mix them wel together and make thereof a Lute which will be so hard that no spirit will pierce it, and this serves for the closure of Glasses.

Or,

Take Loam and the white of an egge, mix them into a paste, and spread it on a cloth. This also is a good closure.

Or,

Moisten an Ox bladder in the white of an egge beaten to water, or in defect of a bladder use paper, and bind them round where the vessels are joined together, one over another two or three times.

Or,

If the spirits in the glasse be exceeding corrosive, then use the *Caput mortuum* of *Aqua fortis*, Linseed oil, and chalk mixed together.

If a Glasse be cracked, then wet a linnen cloth in the white of an egge beaten to water, and lay upon it, and upon that presently whilst it is wet, sift some unslaked Lime, and presse it close with your hand, when that is dry lay on another cloth thus wet as before, and on it sift more Lime.

A vessell may be stopp'd close with Quicksilver that no spi-
rits

it can breath forth, by which means the glasse will be preserved from breaking by the inclosed spirits, (for the head will first yeild before the glasse breaks) the Vessell must be made as the figure here-under sheweth. This also is a good way to preserve spirits already distilled from the air.

A, Signifies the head or cover.

B, The body or vessell it self.

C, The little glasse to take out the Liquor that is in the vessell because it cannot well be poured out, as by reason of the Quick-silver which will be apt to be lost, so by reason of the form of the Vessell it self.

D, A false bottom where the Quick-silver must lye, in to which the head must be set upon the Quick-silver that so the Quick-silver may come above the bottom of the Head.



Also you may make stopples of Glasses ground so smooth that no vapour can get forth by them, as you may see by this pattern.



A, Signifies the stopple of glasse ground very smooth and fit to the mouth of the Vessel.

B, The glasse body.

But the best way is to have a crooked pipe, which may have quick-silver in it, and be well luted to the body that no spirit can get forth: and by this means the glasse will never break, for the quick-silver will first yeeld.

A, The

Now shew the way to nip up a glasse, or seal it up Hermetically after this manner.

A, The crooked pipe.

B, The glasse body.

Or upon the top of a glasse stopple there may be fastned some lead, that if the spirit be too strong it wil only heave up the stopple and let it fall down again.

C, The glasse stopple with lead on the top.

D, The mouth of the vessell it self.



Now the way to nip up a glasse, or seal it up Hermetically is after this manner.

PUt what matter you please into a bolt head with a long neck or pipe, put this pipe through a pan that hath a little hole made in the bottom thereof, that the top of it may be three or four inches above the pan, close up the hole round about the pipe with clay, then put coals in the pan and kindle first those that are furthest off from the pipe that the heat may come by degrees to the pipe. (for otherwise a sudden heat will break it) when the pipe is hot, blow the coals about it till it melt, then with a pair of shears cut it off where it is melted, and then with a pair of tongs close it together.

Note that after you have closed it you must put the burning coals upon the top thereof, and let it thus stand till all be cold which.

which must be done by degrees, for otherwise the glasse will certainly crack in the place where it is nipped.

Note that the pan must stand upon some frame, or some hollow place that there may be a passage for the pipe to come through it



Also the bole-head must stand upon a treefoot or some other firme place according to this figure.

An Explanation of such hard words, and terms of Art, which are used in this ensuing Treatise.

A M^algamation is a calcining or corroding metals with quicksilver, and it is done thus. Take any metall except iron, beaten into thin leafs, or very small powder, mix it with about 8. parts of quicksilver (which may the better be done if both be heated first) that they may become one uniform masse, evaporate the quicksilver over the fire, and the metall will be left in the bottom as a thin calx.

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Calcination is a reducing any thing into a Calx, and making it fryable, and it may be done two wayes,

- By reducing into ashes.
- By firing
- By reverberating.
- By Corosion
 - By Amalgamation,
 - Precipitation,
 - Fumigation or vaporation,
 - Cementation or stratification.

Circulation, is when any liquor is so placed in digestion, that it shall rise up and fall down, rise up and fall down, and so do continually, and thereby become more digested and mature, for which use for the most part we use a Pelican.

Clarification, is the separating of the grosse feces from any decoction or juice, and it is done three wayes,

- By the white of an Egge,
- By digestion,
- By filtration.

Coagulation, is the reducing of any liquid thing to a thicker substance by evaporating the humidity.

Cobebation, is the frequent abstraction of any liquor, poured oft-times on the feces from whence it was distilled, by distillation.

Congelation, is when any liquor being decocted to the height, is afterward by setting into any cold place turned into a transparent substance like unto ice.

Corosion, is the Calcining of bodies by corrosive things.

D.

Decantation, is the pouring off of any liquor which hath a settling, by inclination.

Deliquium, is the dissolving of a hard body into a liquor, as salt,

D

salt, or the powder of any calcined matter, &c. in a moist, cold place.

Descension, is when the essentiall juice dissolved from the matter to be distilled doth descend, or fall downward.

Despumation, is the taking off the froth that floats on the top with a spoone or feather, or by percolation.

Distillation, is the extracting of the humid part of things by vertue of heat, being first resolved into a vapour, and then condensed again by cold. Thus it is generally taken, but how more particularly, I shall afterward shew.

Digestion, is a concocting, or maturation of crude things by an easie and gentle heat.

Dissolution, is the turning of bodies into a liquor by the addition of some humidity.

Dulcoration, or *Dulcification*, is either the washing off the salt from any matter that was calcined therewith, with warm water, in which the salt is dissolved, and the matter dulcified: or it is sweetning of things with sugar, or honey, or syrup.

E.

Elevation, is the rising of any matter in manner of fume, or vapour, by vertue of heat.

Evaporation, or *Exhalation*, is the vapouring away of any moisture.

Exaltation, is when any matter doth by digestion attain to a greater purity.

Expression, is the extracting of any liquor by the hand, or by a Presse.

Extraction, is the drawing forth of an essence from a corporeall matter by some fit liquor, as spirit of wine, the feces remaining in the bottome.

F.

Fermentation, is when any thing is resolved into it self, and is rarified, and ripened, whether it be done by any ferment added to it, or by digestion only.

Filtration, is the separation of any liquid matter from its feces by making it run through a brown paper made like a tunnell, or a little bag of woollen cloth, or through shreds.

Fixation, is the making of any volatile, spiritual body endure
the

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H

the fire, and not fly away, whether it be done by often reiterated distillations, or sublimations, or by the adding of some fixing thing to it.

Fumigation, is the calcining of bodies by the fume of sharp spirits, whether vegetable or mineriall, the bodies being laid over the mouth of the vessell wherein the sharp spirits are.

H.

Humectation, or *Irrigation*, is a sprinkling of moisture upon any thing.

I

Imbibition, is when any dry body drinks in any moisture that is put upon it.

Impregnation, is when any dry body hath drank in so much moisture that it will admit of no more.

Incorporation, is a mixtion of a dry and moist body together, so as to make an uniform masse of them.

Infusion, is the putting of any hard matter into liquor, for the virtue thereof to be extracted.

Insolation, is the digesting of things in the Sun.

L

Levigation, is the reducing of any hard matter into a most fine powder.

Liquation, is a melting or making any thing fluid.

Lutation, is either the stopping of the orifices of vessels, that no vapour passe out, or the coating of any vessell to preserve it from breaking in the fire,

M.

Maceration, is the same as Digestion.

Maturation, is the exalting of a substance that is immature and crude to be ripened and concocted.

Menstruum, is any Liquor that serves for the extracting the essence of any thing.

P.

Precipitation, is when bodies corroded by corrosive spirits either by the evaporating of the spirits remain in the bottome, or by pouring something upon the spirit, as oil of Tartar, or a good quantity of water, do fall to the bottom.

D 2

Purification

Purification, is a separation of any Liquor from its feces whether it be done by clarification, filtration, or digestion.

Putrefaction, is the resolution of a mixt body into it self, by a naturall gentle heat.

Q.

Quintessence, is an absolute, pure and well digested medicine, drawn from any substance, either animall, vegetable or minnerall.

R.

Redification, is either the drawing of the flegm from the spirit, or of the spirit from the flegm, or the exaltation of any Liquor by a reiterated distillation.

Reverberation, is the reducing of bodies into a Calx, by a reflecting flame,

S.

Solution, is a dissolving or attenuating of bodies.

Stratification, is a strewing of corroding powder on plates of metall by course.

Sublimation, is an elevating, or raising of the matter to the upper part of the vessell by way of a subtile powder.

Subtiliation, is the turning of a body into a Liquor, or into a fine powder.

T.

Transmutation, is the changing of a thing in substance, colour, and quality.

V.

Volatile, is that which flyeth the fire.

Rules to be considered in Distillation.

I.

Make choice of a fit place in your house for the furnace, so that it may neither hinder any thing, nor be in danger of the falling of any thing into it that shall lye over it: for a forcing Furnace it will be best to set it in a chimney, because a strong heat is used to it, and many times there are used brands which will smok, and the fire being great the danger thereof may be prevented, and of things of a maligne and venenate qualitie being

ing distilled in such a Furnace, the fume or vapour, if the glass should break, may be carryed up into the chimney which otherwise will flye about the room to thy prejudice.

2.

In all kinds of Distillation the vessels are not to be filled too full, for if you distill Liquors they will run over, if other solid things, the one part will be burnt before the other part be at all worked upon, but fill the fourth part of Gourds, the half of Retorts, the third part of copper vessels; and in rectifying of spirits fill the vessell half full.

3.

Let those things which are statulent, as wax, resin, and such like, as also those things which do easily boile up, as honey, be put in a lesser quantity, and be distilled in greater vessels, with the addition of salt, sand, or such like.

4.

There be some things which require a strong fire, yet you must have a care that the fire be not too vehement for fear their nature should be destroyed.

5.

You must have a care that the lute with which vessels are closed, do not give vent and alter the nature of the Liquor, especially when a strong fire is to be used.

6.

Acid Liquors have this peculiar property, that the weaker part goes forth first, and the stronger last; but in fermented and Liquors the spirit goeth first, then the flegme.

7.

If the Liquor retain a certain Empyreuma, or smatch of the fire, thou shalt help it by putting it into a glass close stopp'd, and so exposing it to the heat of the Sun, and now and then opening the glass that the fiery impression may exhale, or else let the glass stand in a cold moist place.

8.

When you put water into a seething Balneum wherein there are glasses, let it be hot, or else thou wilt endanger the breaking of the glasses.

9.

When thou takest an earthen or glass vessel from the fire, expose it not to the cold air too suddenly for fear it should break.

10.

If thou wouldst have a Balneum as hot as ashes, put sand or sawdust into it, that the heat of the water may be therewith kept in, and made more intense.

11.

If you would make a heat with horse-dung, the manner is this, viz. make a hole in the ground, then lay one course of horse dung a foot thick, then a course of unslaked lime half a foot thick, then another of dung, as before, then set in your vessel, and lay round it lime and horse dung mixt together; press it down very hard; you must sprinkle it every other day with water, and when it ceaseth to be hot, then take it out and put in more.

12.

Note that alwayes sand or ashes must be well sifted, for otherwise a coal or stone therein may break your glass.

13.

The time for putrefaction of things is various, for if the thing to be putrefied be vegetables and green, less time is required, if dry, a longer, if Minerals, the longest of all. Thus much note, that things are sooner putrefied in cloudy weather then in fair.

14.

If thou wouldst keep vegetables fresh and green all the year, gather them in a dry day, and put them into an earthen vessel, which you must stop close, and set in a cold place: and they will, as saith *Glauberus*, keep fresh a whole year.

15.

Do not expect to extract the essence of any vegetable unless by making use of the feces, left after distillation: for if you take those feces, as for example of a nettle, and make a decoction thereof, and strain it and set it in the frost, it will be congealed & in it will appear a thousand leavs of nettles with their prickles which when the decoction is again resolved by heat, vanish away, which shews that the essence of the vegetables lies in the salt thereof.

16.

In all your operations, diligently observe the processes which you read, and vary not a tittle from them, for sometimes a small mistake or neglect spoils the whole operation, and frustrates your expectation.

17.

Try not at first experiments of great cost, or great difficulty, for it will be a great discouragement to thee, and thou wilt be very apt to mistake.

18.

If any would enter upon the practise of Chymistrie, let him apply himself to some expert Artist for to be instructed in the manual operation of things, for by this means he will learn more in two months, then he can by his practise and study in 7 years, as also avoid much pains and cost, and redeem much time which else of necessity he will lose.

19.

Enter not upon any operation, unless it be consistent with the possibility of nature, which therefore thou must endeavour as much as possibly may be, to understand well.

20.

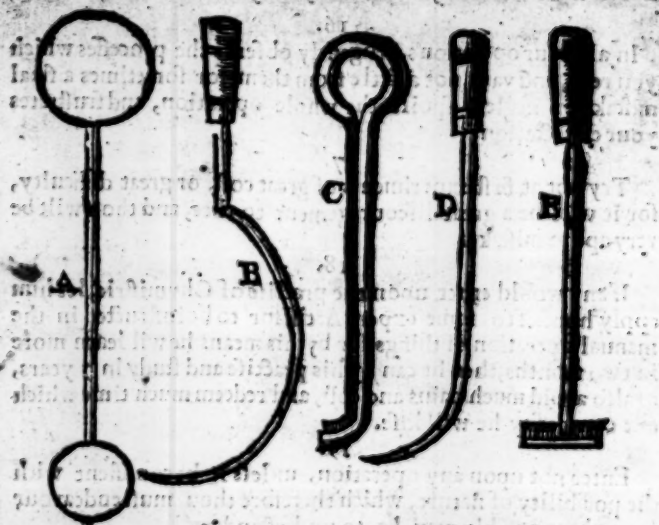
Do not interpret all things thou readeest according to the literall sense, for Philosophers when they wrote any thing too excellent for the vulgar to know, expressed it enigmatically, that the sons of Art only might understand it.

21.

In all thy operations propose a good end to thy self, as not to use any excellent experiment that thou shalt discover, to any ill end, but for the publick good.

22.

It will be necessary that thou knowest all such instruments that thou shalt use about thy Furnace and Glasses, whereof some are already expressed, and some more are shewn in the following page.



A. Signifies an iron rod with two iron rings at the ends thereof, which must be heated red hot, and applied to that part of the glass which thou wouldst break off. When thou hast held it there so long till the glass be very hot, then take it off, and drop some cold water where thou wouldst have it break off, and it will presently crack in sunder. These rings are for such glasses as will go into them: Thou must have divers of this sort, even of all sizes.

B. An iron hook which must be heated hot, and applied to any great glass that will not go into a ring, this hook hath a wooden handle.

C. A pair of tongs which are for divers uses.

D. A crooked iron to rake betwixt the grates to clear them.

E. An iron rake to rake the ashes out of the ash-hole.

A thread dipt in melted brimstone and tyed about a glass, and then fired, may serve in stead of the iron rings, and the hook.

Common

Common distilled simple waters, are made thus.

TAke what herbs or flowers you please, put them into a common cold Still, and let them distill gently.

This is the form of a common cold Still.



But note that this kinde of water is but the flegm of the vegetable which you distill, and hath very little vertue or odour in it; only roses and mints and two or three more have an odour, but all besides, have as little vertue as common distilled water.

I do not deny but that it may be so ordered, that these kinde of waters may partake both of the smell and strength of their vegetables in a good measure, and it is thus.

To make waters in a cold Still that shall have the full smell and vertue of the vegetable.

TAke what herbs, flowers, or roots you please (so that they be green) bruise them and mix with them some leaven, and let them stand close covered for four or five days: then distill them after the manner aforesaid.

*Another way to make Water taste and smell
strong of its vegetable.*

WHen you have distilled any vegetable in a cold Still after the usuall manner (so that you take heed you dry not the hearb too much, which you may prevent by putting a brown paper in the bottom of the Still, giving it a gentle fire, and turning the cake before it be quite dried) take the cakes that remain in the bottome of the Still, and the water that is distilled from thence (having a good quantity thereof) and put them into a hot Still, and let them stand warm for the space of 24 hours, then distil them. Then if you would have the water strong, put the said water into more fresh cakes, casting away the other, and doe as before. This is the truest and best way to have the water of any vegetables. Also thou shalt by this way purchase some oil which is to be separated and to be kept by it self.

*To make water at any time of the year in a cold Still without green
herbs, so that the water shall smell strong of the hearb.*

Put fair water into the body of the cold Still, then hang a bag full of that hearb that thou wouldst have the water of, being first dried, or seed or root thereof first bruised, then make a strong fire under the Still.

Note that those vegetables of which the water is made after this and the former manner, must be of a fragrant smell, for such as have but little or no smell cannot yeeld a water of any considerable odour.

*Another way to make a water taste and smell strong
of its vegetables.*

TAke of the dry hearb, or seed, or root bruised, to a pound of each, put 12. pints of spring water, distill them in a hot Still or Alembick; and the water that is distilled off put upon
more

more of the fresh hearbs, seeds, or roots; do this three or four times, and thou shalt have a waterfull of the vertue of the vegetable, being almost as strong as a spirit.

To make the water of the flowers of Jasmin, Honey-suckles, or Woodbine, Violets, Lillies, &c. retain the smell of their flowers.

The reason why these flowers in the common way of distillation yeeld a water of no fragrancie at all, although they themselves are very odoriferous, are either because if a stronger fire be made in the distilling of them, the grosser and more earthy spirit cometh out with the finer, and troubleth it, as it is in case the flowers be crushed or bruised (where the odour upon the same account is lost) or because the odoriferous spirit thereof being thin and very subtle, riseth with a gentle heat, but for lack of body vapours away. The art therefore that is here required, is to prevent the mixtion of the grosser spirit with the finer, and to give such a body to the finer that shall not embase it: and it is thus.

Take of either of the aforesaid flowers gathered fresh, and at noon in a fair day, let them not at all be bruised. Infuse a handfull of them in two quarts of White-wine (which must be very good, or else you labour in vain) for the space of half an hour, then take them forth, and infuse in the same wine the same quantity of fresh flowers, this do eight or ten times, but still remember that they be not infused above half an hour, (for according to the rule of infusion, a short stay of the body that hath a fine spirit in the liquor receiveth the spirit; but a longer stay confoundeth it, because it draweth forth the earthy part withall, which destroyeth the finer:) then distill this liquor (all the flowers being first taken out) in a glass gourd in a very gentle Balneo, or over a vapour of hot water, the joints of the glass being very well closed, and thou shalt have a water of a most fragrant odour. By this means the spirit of the wine which serves to body the fine odoriferous spirit of the flowers riseth as soon as the fine spirit it self, without any earthiness mixed with it.

Note that in defect of Wine, *Aqua vita* will serve; also strong beer, but not altogether so well, because there is more gross earthiness in it then in wine.

The water of either of these flowers is a most fragrant perfume, and may be used as a very delicate sweet water, and is no small secret.

A Furnace with his vessels to distil liquors with the steam of boyling water.



A, Shews the head of the Alembick.

B, The body thereof placed in a brasse vessel made for that purpose.

C, A brasse vessel perforated in many places to receive the vapor of the water. This vessel shal contain the Alembick compassed about with sawdust, not only that it may the better and longer retain the heat of the vapour, but also lest it should be broken by the hard touch of the brasen vessel.

D, Shews the brasse vessel containing the water as it is placed in the Furnace.

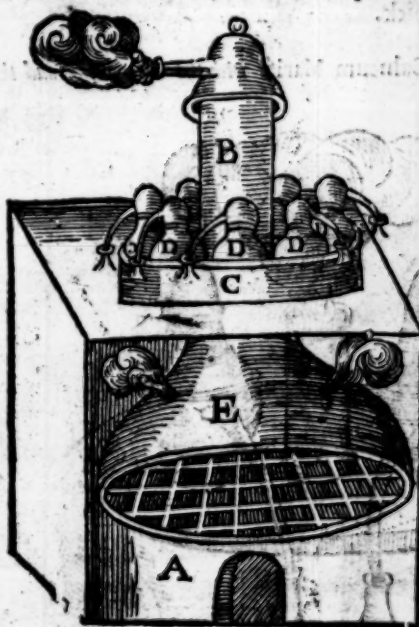
E, The Furnace containing the vessel.

F, A Funnel by which you may now and then pour in water in stead of that which is vanished and dissipated by the heat of the fire.

G, The Receiver.

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The delineation of a Bath. Mar. which may also serve to distill with ashes.



A, Shews the Furnace with the hole to take forth the ashes.

B, Shews another furnace, as it were set in the other: now it is of brass, & runs through the midst of the kettle made also of brass, that so the contained water or ashes may be the more easily heated.

C, The kettle wherein the water, ashes, or sand, are contained.

D, The Alembick set in the water, ashes, or sand, with the mouths of the receivers.

E, The bottom of the second brass Furnace, whose top is marked with B, which contains the fire.

A water out of Berries, is made thus.

TAKE of what Berries you please being full ripe, put them into a gourd glass, steewing upon them a good quantity of powdered sugar, cover them close, let them stand three weeks or a month, then distill them in Balnes.

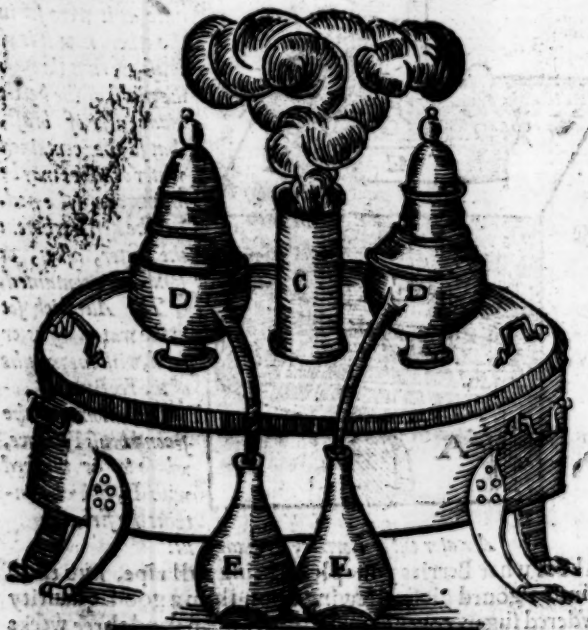
After this manner [Strawberries, Raspberries, Elderberries, and black Cherries may be distilled: But note that such as have stones, must first be bruised together with their stones.

A sweating water made of Elderberries.

TAKE of Elder berries as many as you please, press out the juice thereof, to every gallon thereof put a pint of White wine vinegar, of the lees of Whitewine a pint, let them stand in a

wooden vessell, which thou must then set in some warm place near the fire-side for the space of a week, then distill them in a hot Still, or Alembick.

The Furnace for a Balneum Mariæ with the Alembicks and their receivers.



A, Shows the brass Kettle full of water.

B, The cover of the Kettle perforated in two places, to give passage forth to the Vessels.

C, A Pipe or Chimney added to the Kettle, wherein the fire is contained to heat the water.

D, The Alembick consisting of its body and head.

E, the Receiver wherein the distilled liquor runs.

The

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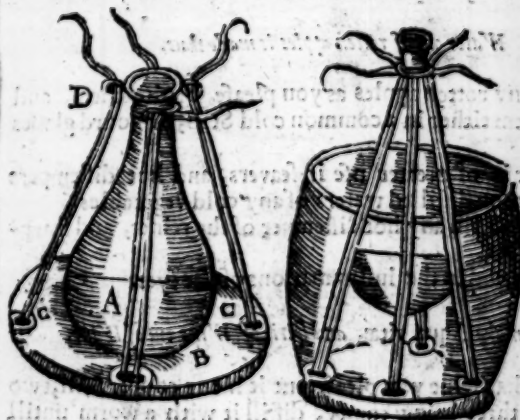
The effigies of another *Bain-Mar* not so easie to be removed as the former.



A, Shews the vessell or Copper that contains the water.

B, The Alembick set in water.

But lest the bottom of the Alembick being half full, should float up and down in the water, and so strike against the sides of the Kettle, I have thought good to shew you the way and means to prevent that danger.



A, Shews the vessel or glass Alembick.

B, A plate of lead wherein it stands.

C, Strings that bind the Alembick to the plate.

D, Rings through which the strings are put to fasten the Alembick.

In defect of a Furnace for a Balneum, you may make use of a pot set upon a trevel after this manner.



An ounce or two of this water of Elder berries is a very excellent sudorifick, and is very good in all diseases that require sweat, as also in hydropicall diseases.

Water out of rotten apples is made thus.

TAKE as many rotten apples as you please, bruise them, and distill them either in a common cold Still, or gourd glasses in Balneo.

This water is of greater use in feavers, and hot distempers then the common distilled waters of any cold vegetables.

It is very good in any hot distemper of the reins, and sharpness of Urine.

It is very good in the inflammations of the eyes.

How to make Aqua vitæ, and Spirit of Wine out of Wine.

TAKE of what wine you please, put it into a copper Still, two parts of three being empty, distill it with a worm untill

no more spirit come off, then this spirit will serve for the making of any spirits out of vegetables: but if thou wouldst have it stronger distill it again, and half will remain behind as an insipid flegm: and if thou wouldst have it yet stronger, distill it again, for every distillation will leave behind one moiety of flegm or thereabouts; So shalt thou have a most pure and strong spirit of wine.

A hot Still.



A, Sheweth the bottom which ought to be of Copper.

B, The head.

C, The barrell filled with cold water to refrigerate and condensate the water and oile that runs through the pipe or worm that is put through it.

D, A pipe of brass or pewter, or rather a worm of Tin running through the barrell.

E, The Alembick set in the furnace with the fire under it.

How to make Aquavitz out of beer.

TAKE of stale strong-beer or rather the grounds thereof, put it into a Copper Still with a worm, distill it gently (or otherwise it will make the head of the Still fly up) and there will come

F

come

come forth a weak spirit, which is called low wine: of which when thou hast a good quantiry thou mayest distill it again of it self, and there will come forth a good *Aqua vite*. And if thou distillest it two or three times more, thou shalt have as strong a spirit as out of wine, and indeed betwixt which and the spirit of wine, thou shalt perceive no ne or very little difference.

How to rectifie spirit of Wine or Aqua vite.

Distill it in *Balneo* untill the last drop that comes off be hot, and full of spirit.

Note that every time there will remain in the bottome a quantity as weak as water.

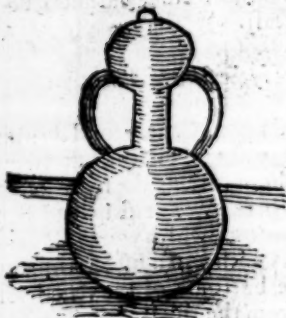
Note also that every time thou distillest it, when thou perceivest that a very weak water comes over, thou shalt then end that distillation.

To make the Magistery of Wine, which will be one of the greatest Cordials, and most odoriferous Liquor in the world.

Take good old rich Canary Wine, put it into a glass vessell that it may fill the third part thereof, nip it up and set it in a continuall heat of horse dung for the space of four months: then in frosty weather set it forth into the coldest place of the air you can, for the space of a month, that it may be congealed: And so the cold will drive in the true spirit of the wine into the Center thereof, and separate it perfectly from its flegm. That which is congealed cast away; but that which is not congealed esteem as the true spirit of Wine. Circulate this in a Pelican with a moderate heat for the space of a month, and thou shalt have the true magistery or spirit of Wine, which as it is most cordial, so also most balsamicall, exceeding all balsames for the cure of Wounds.

The form of a Pelican.

The Form of a Pelican



The matter must be put in at the top which afterwards must be closed up.

To make another Magistery of Wine that a few drops thereof shall turn Water into perfect Wine.

TAKE of the best Canary Wine, as much as you please, let it stand in putrefaction forty dayes, then distill it in *Balneo*, and there will come forth a spirit, and at last an oil, separate the one from the other, and rectifie the spirit. Set the oil again in putrefaction forty dayes, and then distill it. The feces that are left after the first Distillation will yeeld a volatile salt, which must be extracted without Calcination, with the flegm of the spirit, purifie it well, then impregnate the salt with its spirit, and digest them, then adde the oil, and digest them together till they become a red powder, which you may use as it is, or else set it in a cellar till it be dissolved into a liquor, and a few drops thereof will doe as above said.

To make an oil of Wine.

TAKE weak spirit of Wine, distil it in a Vessel of a long neck, then pour on this spirit again upon the flegm, distill it again, do this severall times, and you shall see the oil of the Wine swim on the flegm, which flegm you must separate from the oil by a tunnell.

If this oil be afterward circulated for a month; it will thereby become most odoriferous, and of singular vertue, and good, being both very cordiall and balsamicall.

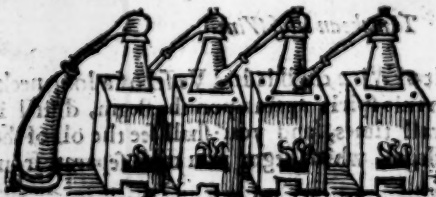
To extract the spirit out of Wine by the spirit of Wine.

PUt spirit of Wine well rectified upon Canary or Rhenish Wine, so cautiously that it may not mix with, but swim upon the Wine, let them stand without stirring the space of 48 hours. Then will the spirit that is in the Wine rise up and join it self to the spirit that swims on the top, which you shall perceive by the weakness of the flegm, which you must let run out at a tap, which must be made in the bottome of the vessell for that purpose, and so be separated from the spirit.

To make a very subtill spirit of Wine at the first distilling.

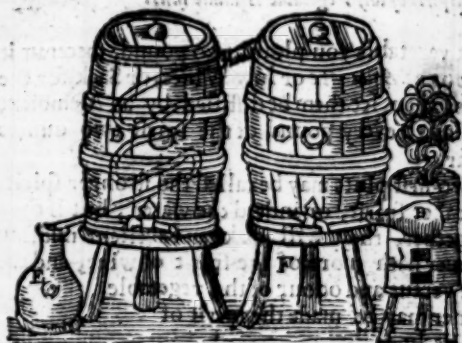
TAke white, or wheaten bread as soon as it comes forth of the Oven, break it in the middle, i.e. the upper side from the lower side, and hang it in a Glass vessell over Canary Wine, but so that it touch not the wine; then cover the vessel and let it so stand untill the bread swell and be sufficiently impregnated with the Spirit of Wine, which it will attract from the Wine: then take out that bread and put in more, till you have a considerable quantity of bread thus moistned. Then put this bread into a glass body, and distill it in Balneo, and you shall have a very subtile spirit, which you may yet rectifie by Circulation.

By Furnaces and Vessels made after this ensuing figure, there may be made four Rectifications of any spirit at once.



These Vessels may either stand in ashes, or in Balneo.

The manner of Distilling in wooden Vessels.



A, Signifieth the vessel wherein the copper vessel lyeth.

B, The copper vessel, part of which is in the Furnace, and part in the vessel of wood.

C, The vessel of wood wherein the matter must be that is distilled.

D, The cooling vessel with the worm.

E, The Receiver. F, The Triefoot wherein the vessel standeth.

Note that the greater the Copper vessel is, and the lesse the wooden is, the sooner will the liquor boile.

This Furnace shews how to draw forth spirits and waters out of vegetables and animals with little cost and in short time.

A Balneum and a boiling Vessel made of Wood.



Note that on the right hand, these vessels have a copper vessel hanging forth which must be set into a Furnace as is above shewed; and on the left hand is a cock or Tap to let out the water.

The vessell on the left hand is for a *Balneum*, the holes in the cover thereof are either to set in vessels over the fume of the water, or for the necks of the glasses set in the *Balneo* to pass through.

The vessell on your right hand is to boile water in for any use, also to brew in.

The Spirit of any Vegetable is made thus.

TAKE of what vegetable you please, two pound, macerate it in six Gallons of *Aqua vite* or low Wines, or Sack, for the space of 24. hours, then let them be distilled by an Alembick, or hot Still, putting to every pound of the spirit two ounces of most pure sugar.

Note that the two first pints may be called the stronger spirit, and the rest the weaker spirit, or indeed the water, but if they be both mixed together, they will make an excellent midling spirit, for the former hath more of the spirit of wine, and the latter more of the vertue and odour of the vegetable.

After this manner may be made the spirit of

Herbs,
Flowers,
the { Roots } of Vegetables
 { Seeds }
Berries,
Barks,
Rinds,
and Spices,

Note that the Hearbs and Flowers must be cut small, the rest bruised.

If you would make it stronger, then take all the foresaid spirit, and as much more Sack or low Wines, and put them upon the same quantity of fresh vegetables and distil them; repeat this three or four times if thou pleasest.

Note also that the Vegetable must be dried; because else the spirit will not be so good, as if otherwise.



The

The form of an Alembick.



A, Signifies the vessel which must be of Copper, in which the matter is contained, and which is set over a naked fire.

B, Signifies the belly that is fastened to the Neck, that the Neck may the more commodiously be applied to the large mouth of the vessel. But it may be so ordered that the mouth of the upper vessel and lower vessel may be so fitted that they shall not need this Belly.

C, The long Neck of the upper vessel whereby the spirit or water passing is somewhat cooled.

D, The head. E, The vessel that compasseth the head, into which cold water is continually poured after the heating.

F, The long receiver. G, The top or Cock, letting out the water when it is hot.

The Spirit of any vegetable may suddenly, at any time of the year be made thus.

Take of what Hearb, Flower, Seeds, or Roots you please. Fill the head of the Still therewith, then cover the mouth thereof with a course Canvas, and set it on the Still, having first put into it sack, or low Wines. Then give it fire.

If at any time thou wouldst have the spirit be of the colour of its vegetable, then put of the flowers thereof dried a good quantity in the nose of the Still.

To make any vegetable yeeld its spirit quickly.

Take of what vegetables you please, whether it be the seed flower, root, fruit, or leaves thereof, cut or bruise them small, then

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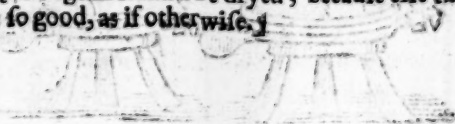
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To make any vegetable yeeld its spirit quickly.

Take of what vegetables you please, whether it be the seed, flower, root, fruit, or leaves thereof, cut or bruise them small, then

then put them into warm water, put yest or balm to them, and cover them warm, and let them work three days as doth Beer, then distill them and they will yeeld their spirit easily.

To reduce the whole into a liquor which may wel be called the Essence thereof.

Take the whole Hearb with flowers, and roots, make it very clean: then bruise it in a stone Morter, put it into a large glais vessel, so that two parts of three may be empty: then cover it exceeding close, and let it stand in putrefaction in a moderate heat the space of half a year, and it will be all turned into a water.

To make an Essence of any Hearb, which being put into a glais, and held over a gentle fire, the lively form and Idea of the Hearb wil appear in the Glais.

Take the foregoing water and distill it in a gourd glais (the joints being well closed) in ashes, and there will come forth a Water and an Oil, and in the upper part of the vessel will hang a volatile salt. The oil separate from the water, and keep by it self; with the water purifie the volatile salt by dissolving, filtering, and coagulating. The salt being thus purified imbibe with the said oil, untill it will imbibe no more, digest them wel together for a month in a vessell hermetically sealed. And by this means you shall have a most subtile essence, which being held over a gentle heat will fly up into the glais, and represent the perfect Idea of that vegetable whereof it is the essence.

The true Essence or rather Quintessence of any Hearb is made thus.

When thou hast made the water and oil of any vegetable, first calcine, i.e. burn to ashes the remainder of the Hearb, with the ashes make a Lye by pouring its own water thereon; when thou hast drawn out all the strength of the ashes, then take off the Lye, being first filtred; and vapour it away, and at the bottom thou shalt find a black salt; which thou must take and put

put into a Cruible and melt it in a strong fire (covering the Crucible all the time it is melting) after it is melted let it boil half an hour or more, then take it out : and beat it small, and set it in a cellar on a Marble stone or in a broad glass, and it will all be resolved into a Liquor ; this Liquor filter, and vapour away the humidity till it be very dry, and as white as snow. Then let this salt imbibe as much of the oil of the same vegetable as it can, but no more lest thou labour in vain. Then digest them together till the oil will not rise from the Salt, but both become a fixed powder, melting with an easie heat.

To extract the Quintessence of all Vegetables.

Take of what spices flowers, seeds, hearbs, woods you please, put them into rectified spirit of Wine ; let the spirit extract in digestion till no more feces fall to the bottome, but all their essence is gone into the spirit of Wine, upon which being thus impregnated pour a strong spirit of salt and digest it in *Balneo*, till an oil swim above, which separate with a Tunnell, or draw off the spirit of Wine in *Balneo* and the oil will remain clear at the bottom, but before the spirit of Wine is abstracted, the oil is bloud red, and a true Quintessence.

An excellent Essence of any Vegetable may be made thus.

Take of the distilled oil of any vegetable, with it imbibe the best Manna being very well depurated, untill it will imbibe no more, then digest them a month, and thou shalt have the true balsome and excellent Essence of any vegetable.

This hath the vertues of the vegetable whereof it was made, but in a more eminent manner.

The depuration of Manna for this use is a great secret.

Water or Spirit of Manna, is made thus.

Take of the best Manna one part, of Nitre two parts, put them into an Ox bladder, and tying it close, put it into warm water to be dissolved. Distill this water in an Alembick, and
G there

there will come forth an insipid water, sudorificall and laxative.

The Chemicall Oil of the Hearb or Flower of any Vegetable is made thus.

Take of the Hearb or Flower dried one pound, of Spring water twenty four pints, distill them in a great Alembick, with its cooler or Copper Still, with a worm passing through a vessel of cold water. Let the oil that is drawn with the water be separated with a Tunnell or separating glass, and let the water that is separated be kept for a new Distillation.

Note that if this water be used two or threetimes in the drawing of the oil, it will be an excellent water of that vegetable from which it is distilled, and as good as most that shal be drawn any other way.

After the same manner are made oil of the dry rinds of

{ Oranges,
 { Citrons,
 { Lemons,

But note that these Rinds must be fresh, and (the inward whiteness being separated) be bruised.

The Oil commonly called the spirit of Roses.

Take of Damask or Red Roses, being fresh, as many as you please, infuse them in as much warm water as is sufficient for the space of twenty four hours. Then strain and press them, and repeat the infusion severall times with pressing, untill the liquor become fully impregnated, which then must be distilled in an Alembick with a refrigeratory or Copper Still with a worm, let the spirit which swims on the water be separated, and the water kept for a new infusion.

This kind of spirit may be made by bruising the Roses with Salt, or laying a lane of Roses and another of Salt, and so keeping them half a year or more, which then must be distilled in as much common water, or Rose water as is sufficient.

Oil

Oils are made out of seeds thus.

Take of what seeds you please, bruised, two pound, of spring water twenty pints, let them be macerated for the space of 24 hours, and then be distilled in a copper Still with a worm, or Alembick with its refrigerating. The oil extracted with the water, being separated with a tunnell, keep the water for a new Distillation.

This Water after three or four distillations is a very excellent water, and better then is drawn any way out of that vegetable whereof these are seeds; I mean for vertue, though not always for smell.

After the same manner are made oils out of spices, and aromaticall woods.

Oils are made out of Berries thus.

Take of what Berries you please, being fresh 25. pounds, bruise them and put them into a wooden vessell with 12 pints of spring water, and a pound of the strongest leaven; let them be put in a cellar (the vessell being close stopped) for the space of three months, then let them be distilled in an Alembick, or copper Still with their refrigeratory, with as much spring water as is sufficient. After the separation of the oil, let the water be kept for a new distillation. Note that the water being used in two or three Distillations is a very excellent water, and full of the vertue of the Berries.

Oil is made out of any Solid Wood thus.

Take of what Wood you please, made into gross powder, as much as you will, let it be put into a Retort, and distilled in sand. The oil which first distils, as being the thinner and sweeter, must be kept apart; which with rectifying with much water may yet be made more pleasant; the acid water or spirit, which in distilling comes first forth, being separated; which also (being rectified from the slegm with the heat of a Balneum) may be kept for use, being full of the vertue of the wood.

After the same manner are made the oil and spirit of Tartar; but thus much note, that both are more pure and pleasant being made out of the Crystals, then out of the crude Tartar.

To make a most excellent oil out of any Wood or Gummes in a short time, without much cost.

Take of what Wood you please, or Gumme bruised small, put it into a vessel fit for it, then pour on so much of spirit of salt as will cover your matter, then set it in sand with an Alembick, make the spirit boil, so all the oil flyeth over with a little flegm, for the spirit of salt by its sharpnesse freeth the oil, so that it flyeth over very easily.

The spirit of salt being rectified may serve again.

To make vegetables yeeld their oil easily.

Distill them being first bruised, in salt water, for salt freeth the oil from its body: Let them first be macerated three or four days in the said water.

Oil or Spirit of Turpentine is made thus.

Take of *Venice* Turpentine, as much as you please, of spring water four times as much, let them be put into an Alembick, or copper Still with its refrigeratory, then put fire under it: so there will distil a thin white oil like water, and in the bottom of the vessel will remain a hard gum called *Colophonia*, which is called boiled Turpentine: That white oil may be better and freer from the smell of the fire if it be drawn in *Balneo*, with a gourd, and glass head.

Common oil Olive may be distilled after this manner, and be made very pleasant and sweet, also most unctious things, as *Sperma celi*.

Oil of Gums, Refines, fat and oily things, may be drawn thus.

Take of either of these which you please, being melted, a pound, mix it with three pound of the powder of tiles, or unslaked lime; put them into a Retort; and extract an oil, which with plenty of water may be rectified.

Note that the water from whence the oil is separated, is of excellent vertue; according to the nature of the matter from whence it is drawn.

Oil of Camphire is made thus.

Take of Camphire sliced thin, as much as you please, put it into a double quantity of *Aqua fortis* or spirit of Wine, let the glasse having a narrow neck, be set by the fire, or on sand or ashes the space of five or six hours, shaking the glasse every half hour, and the Camphire will all be dissolved and swim on the *Aqua fortis*, or spirit of Wine like an oil.

Note that if you separate it, it will all be hard again presently, but not otherwise.

Another way to make Oil of Camphire, that it shall not be reduced again.

Take of Camphire powdered, as much as you please, put it into a glass like a Urinal, put upon it another Urinal-glass inverted, the joints being close shut sublime it in ashes, inverting those Urinals so often till the Camphire be turned into an oil, then circulate it for the space of a month, and it will be so subtle that it will all presently vapour away in the air, if the glass be open.

Another way to make oil of Camphire.

Take two ounces of Camphire, dissolve it in four ounces of pure oil olive, then put them into four pints of fair water, distill

them all together in a glass gourd, either in ashes or Balneo, and there will distill both water and oil, which separate and keep by it self.

All these kinds of oil of Camphire are very good against putrefaction, fits of the Mother, passions of the heart, &c. A few drops thereof may be taken in any liquor, or the breast be anointed therewith: Also the fume thereof may be taken in at the mouth.

A true Oil of Sugar.

Take of the best white Sugar-candie, imbibe it with the best spirit of Wine ten times, after every time drying it again, then hang it in a white silken bag in a moist cellar over a glass vessell that it may dissolve, and drop into it. Evaporate the water in Balneo, and in the bottome will the oil remain.

This is very excellent in all distempers of the Lungs.

Oil of Amber is made thus.

Take of yellow Amber one part, of the powder of flints calcined, or the powder of tiles two parts; mingle them, and put them into a Retort, and distill them in sand; The oil which is white, and clear, which first distilled off, keep by it self, continuing the Distillation as long as any oyl distills off, then let both oyls be rectified apart in a good quantity of water.

The salt of Amber, which adheres to the neck of the Retort within side, being gathered let be purified by solution, filtration, and coagulation according to art, and be kept for use.

After this manner may be made Oyls out of any gums which may be powdered.

Oyl of Myrrhe is made thus.

Take of Myrrhe bruised, of Bay-salt, of each six pound, let them be dissolved in sixty pints of spring water and be distilled in an Alembick, or Copper Still according to Art.

Oyl

Oyl of Myrrhe per deliquium, or by dissolution, is made thus.

Take Hen-eggs boiled hard, and cut in the middle length-ways, take out the yelks, then fill up the hollow half way with powder of Myrrhe, and join the parts together again binding them with a thread, and so set them upon a grate betwixt two platters in a cold moist place, so the liquor of the Myrrhe dissolved will distill into the lower platter.

Oil of Tartar per deliquium, i.e. by dissolution.

Take of the best Tartar calcined white according to Art, put it into a cotten bag, hang it in the cellar or some moist place, putting under a Receiver.

Oyls by Expression are made thus.

Take of what things you please, such as will afford an oyl by expression, bruise them, then put them into a bag, and press them strongly, putting a vessel under to receive the oyl.

Note that they must stand in the Press some hours, because the oyl drops by little and little.

Note also that if you warm them before you put them into the Press they will yeeld more oyl, but then it will not keep good so long as otherwise.

After this manner are made oyls of

{ Nutmegs,
Maces,
Almonds,
Linseed,

and such like.

A vomiting and purging Oil made by expression.

Take of the Berries of Ebulus or Dwarfse Elder, as many as you please, let them be dryed but not over-much, then bruise them, and in bruising them moisten them with the best spirit.

spirit of Wine, untill they begin to be oily; then warm them by the fire, and press forth the oil, and set it in the sun to be purified.

Ten drops of this oil taken inwardly worketh upward and downward, and is very good against the drop sicke, and all waterish diseases.

The belly being therewith anointed, is made thereby soluble.

Any part that is much pained with the gout or any such grief, is presently eased by being anointed with this oil.

Oil of Jasmine is made thus.

Take of flowers of Jasmine, as many as you please, put them into as much sweet mature oil as you please, put them into a glass close stoppt, and set them into the Sun to be infused for the space of twenty dayes, then take them out and strain the oil from the flowers: and if thou wouldst have the oil yet stronger, put in new flowers and do as before.

This is a pleasant perfume, and being mixt with oils and ointments, gives them a gratefull smell: It is also used in the perfuming of Leather.

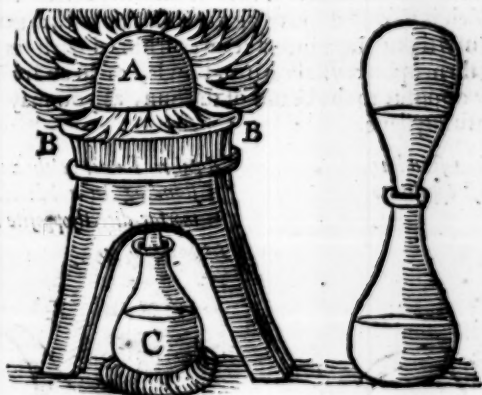
After this manner may be made oil of any flowers, but because I shall keep my self to the Art of Distillation only, I shall not so far digress as to speak of these kinds of oils: only I thought good to set down the oil of Jasmine because by reason of its fragrantcy it hath some analogie with Chymicall oils that are made by Distillation.

To make any Oil or Water per descensum.

Take an earthen gourd, fill it full with wood or hearbs, or what you please, being cut small, then invert it, i.e. turn it upside down, and set it in the furnace, lute it well thereunto, then set another gourd of earth under it with a wider mouth that the uppermost may goe into it, before you put the one into the other, you must have a little vessell or instrument of Tin with brims round about on the top, by which it must hang into the lower gourd, the body thereof being 2 or 3 inches deep,
and

and full of holes, that the oyl or water may drop through, and not the vegetable it self. Into this Instrument being first set into the lower gourd, put the mouth of the upper gourd, then make thy fire on the top, and keep it burning as long as any liquor will drop.

The Figure of this furnace is thus.



- A, Signifies the gourd containing the matter to be distilled.
 B, The Furnace containing the Coals, so that they surround the upper gourd.
 C, The lower gourd or recipient set upon straw-rings.
 D, The vessell of Tin with holes and brims, which must be set in the Recipient.

How to make an Oyl and Water out of Soot.

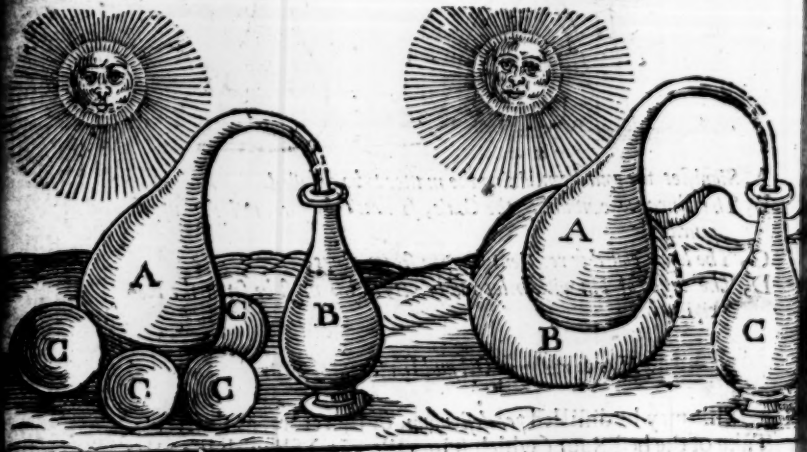
This may be distilled *per descensum*, or by retort, as thus, *viz.* Take of the best Soot (which shines like Jet) fill with it a glass Retort coated, or earthen Retort to the neck, distil it with a strong fire by degrees into a large Receiver, and there will come forth a yellowish spirit with a black oyl, which thou mayest separate and digest.

How to rectifie Spirits.

You must set them in the Sun in glasses well stopped, and half filled, being set in sand to the third part of their eight that the water waxing hot by the heat of the Sun may separate it self from the flegm mixed therewith, which will be performed in in twelve or fifteen days. There is another better way to doe this, which is to distill them again in Balneo with a gentle fire, or if you wil put them into a retort furnished with its receiver, and set them upon crystal or iron bowls, or in an iron mortar directly opposite to the beams of the Sun, as you may learn by these ensuing signs.

Retort with its Receiver standing upon Crystal bowls just opposite to the Sun beams.

Another Retort with its Receiver standing in a Marble or Iron mortar, directly opposite to the Sun.



A, Shews the Retort.
B, The Receiver.
C, The Crystal Bowls.

A, Shews the Retort.
B, The Marble or Iron Mortar.
C, The Receiver.

How

How to rectifie all stinking, thick, black Oils that are made by a Retort, and to take away their stink.

Take oyl of Amber, or any such stinking oil, put it into a glass Retort, the fourth part only being full, pour on it drop by drop the spirit of Salt, (or any other acid spirit) and they will boil together; and when so much of the spirit is poured on that it boileth no more, then cease and distill it. First cometh over a stinking water, then a clear white well smelling oyl, and after that a yellow oyl which is indifferent good: but the spirit of Salt hath lost its sharpness: the volatile salt of the oyl remaineth coagulated with the spirit of Salt, and is black, and tasteth like salt Armoniack, and hath no smell being sublimed from it. Now the reason of all this is, because the volatile salt of the oyl which is the cause of the stink thereof, is fixed by the acid spirit of the Salt: for acid Spirits, and volatile Salts, are contrary the one to the other; and spirit of Urine or any volatile Salt, will precipitate any metall as well as salt of Tartar.

These oyls will remain clear, and have far more vertue, then the ordinary sort of oyls have.

As for common ordinary distilled oyls, they need not, if they be well separated from the water with which they were distilled, any rectifying at all: and if you goe about to rectifie them, you will lose good part of them, and make that which remains not at all the better. But if there be any better then another for rectifying of them it is by digestion, by which means there will be a separation of what is flegmatick which you may separate afterwards, and by this means you shall lose none of the oyls.



Of Compound Waters and Spirits.

BOOK II.

A Dissolving Menstruum.

TAKE Cyprus, Turpentine, and the best spirit of wine, of each two pound, distill them in a glass gourd either in Balneo or Ashes. Separate the oil from the spirit with a tunnel or separating glass, distill the spirit again, and so often untill it savour no more of the oyl of Turpentine, and then it is sufficiently prepared.

This Menstruum dissolves any hard stones presently, and extracts the tincture of Corall.

A Glass Gourd with its bag.



Another dissolving Menstruum or acetum Philosophicum.

Take Honey, Salt melted, of each a pound, of the strongest spirit of Vineger two pound; digest them for the space of a fortnight, or more, then distill them in ashes, Cohobate the Liquor upon the feces three or four times, then rectifie the spirit.

Note that they must be done in a large glass Gourd.

This is of the same vertue as the former, if not more powerfull.

Another dissolving Menstruum.

Take of the best rectified Spirit of Wine, with which imbibe the strongest unslaked lime, until they be made into a paste; then put them into a glass gourd and distill off the spirit in ashes: This spirit pour on more fresh Lime, and doe as before, do this three or four times, and thou shalt have a very subtile spirit able to dissolve most things, and to extract the vertue out of them.

Paracelsus his Elixir Subtilitatis.

Take oil Olive, Honey, rectified spirit of Wine, of each a pint, distill them all together in ashes, then separate all the steam from the oyls, which will be distinguished by many colours, put all these colours into a Pelican, and adde to them the third part of the Essence of Balm, and Sallendine, digest them for the space of a month. Then keep it for use.

This Liquor is so subtile that it penetrateth every thing.

Usque-bath, of Irish Aqua vite, is made thus.

Take a Gallon of small Aqua vite, put it into a glass vessel, put thereto a quart of Canary sack, two pound of Raisins of the Sun stoned, but not washed, two ounces of Dates stoned, and the white skins thereof pulled out, two ounces of Cinnamon grossly bruised, four good Nutmegs bruised, an ounce of the best English Licorish sliced, and bruised, stop the vessels very close, and let them infuse in a cold place six or eight days, then let the

Liquor run through a bag called *Manica Hippocratis*, made of white cotton.

This Liquor is commonly used in sursets, being a good Stomach water.

Aqua Celestis is made thus.

Take of Cinamon

Cloves

Nutmegs

Ginger

Zedoary

Galingall

Long-pepper

Citron-pitt

Spicknard

Lignum-aloes

Cububs

Cardamums

Calamus aromaticus

Germander

Ground-pine

Mace

White Frankincense

Tormentill

Hermodystils

the pith of Dwarf Elder

Juniper Berries

Bay Berries

the seeds and flowers of Motherwort

the seeds of Smallage

Fennell

Annis

the leaves of Sorrell

Sage

Felwort

Rosemary

Marjoram

Mints

Penny-royall

Stachados

the flowers of Elder

Roses red

white

of the leaves of Scabious

Rue

the lesser Moonwort

Egrimonie

Centory

Fumitary

Pimpernell

Sowthistle

Eye-bright

Maiden-hair

Endive

Red Saunders

Aloes, of each two ounces

Pure Amber

the best Rhubarb, of each two Drams.

dryed Figs

Raisins of the Sun

Dates, stoned

Sweet-Almonds

Grains of the Pine, of each an ounce.

Of

Book II Of the Art of Distillation

47

Of the best *Aqua vite* to the quantity of them all, of the best
hard Sugar a pound, of white Honey half a pound, then adde
the root of Gentian the root of Briony
flowers of Rosemary Sowbread
Pepper-wort, Wormwood, of each half
an ounce.

Now before these are distilled, quench gold being made red
hot oftentimes in the foresaid water, put therein oriental Pearls
beaten small an ounce, and then distil it after 24 hours infusion.

This is a very Cordiall water, good against faintings and in-
fection.

Aqua imperialis is made thus.

Take of the rind of Citrons dried
Oranges.

Nutmeg

Cloves

Cinnamon, of each two ounces.

the roots of Flower-de-luce

Cyprus

Calamus aromaticus

Zedoary

Galingall

Ginger, of each half a pound.

of the tops of Lavender

Rosemary, of each two handfull,

the leaves of the Bay-tree

Marjoram

Balm

Mints

Sage

Thyme

flower of Roses white

Damask, of each half a handfull

Rose-water four pints

the best White-wine a gallon.

Bruise what must be bruised, then infuse them all 24. hours,
after which distill them.

This is of the same vertue as the former.

Aqua

Of the Art of Distillation

Book the first

Of the Art of Distillation
Aqua Mirabilis is made thus.

Take of Cloves
 Galingall
 Cubebs
 Mace
 Cardamums
 Nutmegs
 Spirit of Wine a pint
 White-wine three pints.
 Infuse all these 24 hours, and then distill off two pints by an Alembick.

This water is very good against wind in the stomach and head.

Dr. Stephens water is made thus.

Take a Gallon of
 Gascoign Wine
 Ginger
 Galingale
 Cinnamon
 Nutmegs
 Grains
 Anniseeds
 Fenell seeds
 Carroway seeds, of
 each a dram.
 Sage
 Red Mints
 Red Roses
 Thyme
 Pellitory
 Rosemary
 Wild Thyme
 Camomil
 Lavender, of each a hand-
 full.

Beat the spices small and bruise the Herbs, letting them ma-
 terate twelve hours stirring them now and then, distill them by
 an Alembick or copper Still with its refrigeratory, keep the
 first pint by it self, and the second by it self.

Note that the first pint will be the hotter, but the second the
 stronger of the ingredients.

This water is well known to comfort all the principal parts.

of famous Surfet Water.

Take of red Popple cakes (after the water hath been distilled
 from them in a cold Still) not over dried two pound, put a peck
 of small stones in a still, and distill off the water.

Book II of the Art of Distillation

them of the water of red Poppie a gallon and ~~and~~ Canary wine three pints; adde to them of Coriander seeds bruised four ounces, of Dill seed bruised two ounces, of cloves bruised half an ounce, of Nutmegs sliced an ounce, of Rosemary a handfull, three Orenge cut in the middle, distill them in a hot Still; to the water put the juice of six Orenge, and hang in it half an ounce of Nutmegs sliced, and as much Cinamon bruised, two drams of cloves, a handfull of Rosemary cut small, sweet Fennell seeds bruised an ounce, of Raisins in the Sun stoned, half a pound, being all put into a bag which may be hanged in the Water (the vessell being close stoppt) the space of a month, and then be taken out, and cast away, the Liquor thereof being first pressed out into the foresaid Water.

This Water is of wonderfull vertue in Surfets and Pleurifies, composeth the Spirits, causeth rest, helpeth digestion if two or three or four ounces thereof be drunk, and the patient compose himself to rest.

A Pectorall Water.

Distill green hyssop in a cold Still till you have a gallon and half of the Water, to this put four handfull of dried Hyssop, a handfull of Rue, as much of Rosemary, and Hore-hound, Elecampane-root bruised, and of Horse-radish root bruised, of each four ounces, of Tobacco in the leaf three ounces, Anniseed bruised two ounces, two-quarts of Canary wine, let them all stand in digestion two days, then distill them, and in the water that is distilled put half a pound of Raisins of the Sun stoned, of Licorish two ounces, sweet Fennel seeds bruised two ounces and a half, Ginger sliced an ounce and a half, and let them be infused in *Frigido* the space of ten days, then take them out.

This water sweetned with Sugar-candie and drunk to the quantity of three or four ounces twice in a day, is very good for those that are pitteall, it strengtheneth the Lungs, attenuates thick flegm, opens obstructions, and is very good to comfort the stomach.

A very excellent water against the worms.

Take of Wormseed bruised eight ounces, the shavings of Harts horne two ounces, of Peach flowers dried an ounce, of Aloes bruised half an ounce, pour on these the water of Tansie, Rue, Peach flowers, and of Wormwood of each a pint and half, let them being put into a glass vessell, be digested the space of three dayes, then distill them; cohobate this water three times.

This water is very excellent against the worms; it may be given from half an ounce to three ounces, according to the age of the patient.

A Water against the Convulsions.

Take of *Ros vitrioli* (which is that water that is distilled from Vitriall in the calcining thereof) two quarts, in this put of Rue a handfull, of Juniper berries bruised an ounce, of Bay berries bruised half an ounce, Piony berries bruised six drams, Camphire two drams, Rhubarb sliced an ounce; digest these four days in a temperate *Balneo*, then distill them in a glass vessel in ashes, and there will come over a water of no small vertue.

It cures convulsions in children especially, it helps also the Vertigo, the Hysterical passion, and Epilepsie, it is very excellent against all offensive vapours and wind that annoys the head and stomach.

It may be taken from two drams to two ounces.

An Hydriacall water.

Take of Wormwood, Broom blossomes, of each a like quantity, bruise them, and mix with them some leaven, and let them stand in fermentation in a cold place the space of a week, then distill them in a cold Still till they be very dry: Take a gallon of this water, and half a gallon of the Spirit of Urine, pour them upon two pound of dried Broom blossoms, half a pound of Horse Radish roots dried, three ounces of the best Rhubarb sliced,

sliced, two ounces of sweet Fennell seed bruised, and an ounce and an half of Nutmegs : let them digest a week being put into a glass vessell, in a temperate *Balneo* ; then press the Liquor hard from the feces, put this Liquor in the said vessell again, and to it put three ounces of sweet Fennel seeds bruised, Licorish sliced two ounces, digest them in a gentle heat the space of a week, then pour it off from the feces, and keep it close stopd.

This water being drank from the quantity of an ounce to four ounces every morning, and at four of the clock in the afternoon, doth seldome fail in curing the drop sicke; it strengtheneth also the Liver, is very good against gravel in the back, stone, cures the Scurvy, Gout, and such diseases as proceed from the weakness and obstructions of the Liver.

A Water against the Colick.

Take of	{	Aniseed three ounces.
		Cummin seed three drams.
		Cinnamon half an ounce.
		Mace.
		Cloves.
		Nutmeg, of each a dram.
		Galingall, three drams.
{	Calamus Aromaticus dried, half an ounce.	
	The dried rind of Orenge, two ounces.	
	Bay berries, half an ounce.	

Let all these being bruised, be macerated in six pints of Mal-lago wine 48 hours, then be distilled in *Balneo* till all be dry.

This water being drank to the quantity of an ounce or two at a time doth ease the gripings of the belly and stomach, very much.

A Water against the Vertigo, and Convulsions.

Take of black cherries bruised with their kernels, a gallon, of the flowers of Lavander three handfull, half an ounce of white Mustard seed bruised; mix these together, then put some ferment

to them and let them stand close covered the space of a week, then distill them in *Balneo* till all be dry.

This water being dranke to the quantity of an ounce or two or three, doth much relieve the weaknesse of the head and helps the Vertigo thereof, as also strengthen the sinews and expell windiness out of the head and stomach.

A compoud Water of Burre root causing sweat.

Take the root of the great Burre, freshly
Swallow wort, fresh.

The middle rind of the root of the Ash tree, of each two pound; cut them small, and infuse them 24 hours in the best White wine and Rue vinegar, of each five pints, then distill them in *Balneo* till all be dry, put to the water as much of the Spirit of Sulphur *per Campanam*, as wil give it a pleasant acidity, and to every pint of the water put a scruple and a half of Camphire cut small, and tyed up in a bag, which may continually hang in the water.

This was a famous water in *Germany* against the plague, pestilence and Epidemical diseases: it causeth sweat wonderfully if two or three ounces thereof be drank and the patient compose himself to sweat.

Another excellent Sudorifick and plague water.

Take of	{	the best spirit of Wine a gallon,
		Andromachus treacle, six ounces,
		Myrrhe two ounces,
		The roots of Colts-foot, three ounces,
		<i>Sperma Ceti</i> ,
		<i>Terra Sigillata</i> , of each half an ounce,
		The root of swallow wort, an ounce,
		Dittany, Pimpernel,
		Valerian root, of each two drams,
		Camphire, a dram.

Mix all these together in a glass vessell, and let them stand close stoped the space of eight dayes in the Sun.

Let the Patient drink of this a spoonful or two and compose himself to sweat.

Dr. Burges his plague water.

Take three pints of Muscadine, and boil in it Sage, and Rue of each a handfull till a pint be wasted, then strain it and set it over the fire again, put therto a dram of long Pepper, Ginger and Nutmeg of each half an ounce being all bruised together: then boil them a little, and put thereto half an ounce of Andromachus treacle, and three drams of Mithridate, and a quarter of a pint of the best Angelica water.

This water (which, as saith the Author, must be kept as your life, and above all earthly treasure) must be taken to the quantity of a spoonful or two morning and evening if you be already infected, and sweat thereupon: if you be not infected, a spoonful is sufficient, half in the morning and half at night; all the plague time under God (saith the Author) trust to this, for there was never man, woman, or child that failed of their expectation in taking of it: This is also of the same efficacy not only against the plague, but pox, measles, sursets, &c.

Crollius his Treacle water Camphorated.

Take of
 { Andromachus his Treacle, five ounces,
 { The best Myrrhe, two ounces, and half,
 { The best Saffron half an ounce,
 { Camphire two drams.

Mix them together, then pour upon them ten ounces of the best spirit of wine, and let them stand 24 hours in a warm place, then distill them in *Balneo* with a gradual fire, cohobate the spirit three times.

This spirit causeth sweat wonderfully, and resists all manner of infection.

It may be taken from a dram to an ounce in some appropriate Liquor.

A distilled Treakle Vinegar.

Take of	{	the roots of	{	Bistort Gentian Angelica Tormentill	}	of each ten drams.
		Pimpernell				
		Bay berries	{	of each an ounce.		
		Juniper berries				
	Nutmeg, five drams					
	The shavings of Sassafras, two ounces,					
	Zedoary half a dram,					
	White Sanders, three drams,					
	{	The leaves of	{	Rue Wormwood Scordium	}	of each half a handfull,
{	The flowers of	{	Wall-flower Bugloss	}	of each a handful and half,	
Andromachus Treakle	{	of each six drams,				
Mithridate						

Infuse them all in three pints of the best White wine vinegar the space of eight dayes in *Frigido* in glass vessels; then distill them in Balneo.

This Spirit is very good to prevent them that are free from infection, and those that are already infected, from the danger thereof, if two or three spoonful thereof be taken once in a day, with sweating after, for those that are infected, but without sweating for others.

An excellent water against the Stone in the Kidneys.

Take of the middle rind of the root of Ash bruised, two pound.
Juniper berries bruised, three pound.

Venice turpentine that is very pure, 2 pound and a half

Put these into twelve pints of spring water in a glass vessell well closed, and there let them putrifie in horse dung for the space

space of three months, then distill them in ashes, and there will come forth an oil and a water, separate the one from the other.

Ten or twelve drops of this oil being taken every morning in four or six spoonfuls of the said water dissolves the gravell and stone in the kidneys, most wonderfully.

Another water for the same use.

Take the juice of Radish, Lemmons, of each a pound and half: Waters of Betony, Tansey, Saxifrage, and Vervin, of each a pint. Hydromell, and Malmsey, of each two pound. In these Liquors mixed together, infuse for the space of four or five days in a gentle Balneo, Juniper berries ripe and newly gathered being bruised, three ounces: the seed of Gromel, Bur-dock, Radish, Saxifrage, Nettles, Onions, Anise, and Fennell, of each an ounce and half, the four cold seeds, the seed of great Mallows, of each six drams, the Calx of Eg-shells, Cinnamon, of each three drams, of Camphire two drams; let all be well strained and distilled in ashes.

Two ounces of this water taken every morning, doth wonderfully cleanse the Kidneys, provoke Urine, and expell the Stone, especially if you calcine the feces and extract the Salt thereof with the said Water.

To make an excellent Wound water.

Take Plantain, Rib-wort, Bone-wort, wild Angelica, Red-mints, Betony, Egrimony, Sanacle, Blew-bottles, White-bottles, Scabius, Dandelion, Avens, Honey-suckle leaves, Bramble buds, Hawthorn buds and leaves; Mugwort, Daisie roots, leaves, and flowers; Wormwood, Southernwood, of each one handfull: Boil all these in a pottle of White wine, and as much Spring water, till one half be wasted; and when it is thus boiled, strain it from the hearbs, and put to it half a pound of honny, and let it boil a little after: then put it into bottles, and keep it for your use.

Note that these hearbs must be gathered in May only, but you may keep them dry, and make your water at any time.

This

This water is very famous in many Counties, and it hath done such cures in curing outward and inward Wounds, Imposthumes, and Ulcers, that you would scarce beleieve it, if I should recite them to you: also it is very good to heal a sore mouth.

The Patient must take three or four spoonfulls thereof morning and evening, and in a short time he shall finde ease and indeed a cure, unless he be so farre declined as nothing almost can recover him.

If the wound be outward it must be washed therewith, and linnen cloths wet in the same be applyed thereto.

Dr. Matthias his Palsie water is made thus.

Take of Lavender flowers a gallon; pour upon them of the best spirit of wine three gallons: the vessell being close stopp'd let them be macerated together in the Sun for the space of six days, then distill them in an Alembick with its refrigeratory, then take the flowers of

{	Sage	} of each a handfull.
{	Rosemary	
{	Betony	
{	Borage	} of each two handfulls,
{	Bugloss	
{	Lillie of the valley	
{	Cowslips	

Let all the flowers be fresh and seasonably gathered, and macerated in a gallon of the best spirits of Wine, and mixed with the aforesaid spirit of Lavender, adding then

the leaves of	{	Balm	} newly gathered
	{	Motherwort	
the flowers of	{	Orange tree	} of each an ounce.
	{	Stechados	
	{	Oranges	
		Bay berries	

After a convenient digestion let them be distilled again, then adde the outward rinds of Citrons six drams,

the seed of Piony husked, fix drams

Cinnamon	} of each half an ounce.
Nutmegs.	
Mace	
Cardamums	
Cububs	
of yellow Sanders	
Lignum Aloes, one dram	
the best Jujubs, the kernels taken out, half a pound.	

Let them be digested for the space of six week, then strain and filtre the Liquor, to which adde of

prepared Pearl, two drams.	} of each an ounce.
prepared Emerald a scruple.	
Amber Gryse	
Musk	
Saffron	
Red Roses	} of each a dram.
Sanders	
Yellow Sanders	
Rinds of Citrons dried	

Let all these species be tyed in a silken bag and hanged in the foresaid spirit.

A Scorbaticall water, or a compound water of Horse radish is made thus.

Take the leaves of both sorts of Scurvie-grafs being made very clean, of each six pound: let these be bruised, and the juice pressed forth: to which adde the

Juice of	Brook-lime	} of each half a pound,
	Water-creffes	
of the best White-wine, eight pints.		
twelve whole Lemons cut.		
} of the fresh roots of	Briony	four pound.
	Horse Radish	two pound.
	of the bark of Winteran,	half a pound.
of Nutmegs		four ounces.

Let them be macerated three days and distilled.

Three or four Spoonfulls of this water taken twice in a day cures the Scurvy presently.

Spirit of Castor is made thus.

Take of	{	fresh Castoreum two ounces	}	of each two drams.
		flowers of Lavender fresh, half an ounce		
		Sage		
		Rosemary		
		Cinnamon three drams		
Take of	{	Mace	}	of each a dram
		Cloves		

Let the best rectified Spirit of Wine, three pints.

Let them be digested in a Glasse (two parts of three being empty) stopt close with a bladder and Cork two dayes in warm ashes; then distill the spirit in *Balneo*, and keep it in a glasse close stopt. If you would make it stronger take a pint of this spirit, and an ounce of the powder of *Castoreum*, put them into a glasse and digest them into a cold place for the space of ten dayes, and then strain out the Spirit.

This spirit is very good against fits of the Mother, passions of the heart which arise from vapours, &c.

Bezoard water is made thus.

Take of	{	the leaves of the greater Sallandine together with the roots thereof, three handfulls and a half.	}	of each a handfull and half.
		Rue, two handfulls.		
		Scordium, four handfull.		
		Dittany of Crete		
		Carduus		
		Root of Zedoary		
		Angelica		
		The outward rind of Citrons		
		Lemmons		
		The flower of Wall-gilly-flower, an ounce and half.		
Take of	{	Red Roses	}	of each two drams.
		the lesser Centory		

Cinnamon

A

Cinnamon $\frac{1}{2}$ of each three drams.
 Cloves $\frac{1}{2}$
 Andromachus his Treacle, three ounces.
 Mithridate, an ounce and half.
 Camphire, two scruples.
 Trochiscs of Vipers, two ounces.
 Mace, two drams.
 Lignum aloes, half an ounce.
 Yellow Sanders, a dram and half.
 The seeds of $\frac{1}{2}$ Carduus, an ounce.
 Citron, six drams.

Cut those things that are to be cut, and let them be macerated three days in the best Spirit of Wine, and Muscadine, of each three pints and half, vinegar of Wall gilly-flowers, and the juice of Lemmons, of each a pint, let them be distilled in a glazed vessell in Balneo.

After half the Liquor is distilled off, let that which remains in the vessell be strained through a linnen cloth, and vapoured away to the thicknes of honey, which may be called

A Bezoard Extract.

This water is a great Cordial, and good against any infection.

To make a specificall Sudorifick.

Take of Ginger a pound, long Pepper, and black Pepper, of each half an ounce, of Cardamums three drams, of Grains an ounce, powder them and put them into a glass with half an ounce of the best Camphire, distilled vinegar two pound, digest them a month, then separate the vinegar by expression, which must putrefie a month, and then be circulated for the space of a week, then filter it, and thou hast as powerfull a Sudorifick as ever was or can be made.

The dose is from a dram to half an ounce, and to be drank in a draught of posset-drink.

Treacle-water is made thus.

Take of	{	the juice of the green shales of Walnuts four pound.	
		the juice of Rue, three pints.	
		Carduus	} of each two pints.
		Marygold	
		Balm	
		the root of Butter-burre fresh a pound and half.	
		Burre	} fresh, of each half a pound.
		Angelica	
		Madder-wort	
		the leaves of Scordium, four handfull.	
old Andromachus treacle	} of each eight ounces.		
Mithridate			
the best Canary, twelve pints.			
the sharpest Vinegar, six pints.			
the juice of Lemmons, two pints.			

Digest them two days in horse dung, the vessell being close stopped; then distill them in sand.

Aqua Marie is made thus.

Take of	{	Sugar candid, one pound.
		Canarie Wine, six ounces.
		Rose water, four ounces.

Make of these a Syrup, and boil it well, to which adde

of	{	<i>Aqua Imperialis</i> , two pints.	
		Amber gryse	} of each eighteen grains.
		Musk	
		Saffron, fifteen grains.	
		yellow Sanders infused in <i>Aqua Imperialis</i> , two drams.	

The Mother water, commonly called Hysterical water, is made thus.

Take of	{	the juice of the root of Briony, four pound.	
		the leaves of	
		Rue	} of each two pound.
		Mugwort	
		Savin dried, three handfull.	
		Mother-wort	} of each two handfull.
		Nippe	
		Penny-royall	
		Garden basill	} of each a handfull and
		Cretenfian Dittany	

the rind of yellow Oranges fresh, four ounces.
 Myrrhe, two ounces.
 Castoreum, an ounce.
 the best Canary wine, twelve pints.

Let them be digested four dayes in a fit vessell, then distill them in Balneo.

A vomiting water is made thus.

Take of the best Tobacco in leaves, cut small, four ounces, Squills two ounces, Nutmegs sliced half an ounce; put these into three pints of spring water, a pint of White wine vinegar, distill them in a hot Still or Alembick.

If thou wouldst have it stronger thou mayest put this water on fresh ingredients, and distill it again.

A little quantity of this water is a most safe and effectuell vomit, and may be taken from the eldest to the youngest, if so be you proportion the quantity to the strength of the Patient.

You may dulcifie it with sugar or syrup if you please.

A vomiting Water made by Platerus.

Take green Walnuts gathered about Midsummer, Radish roots, of each bruised two parts, of distilled Wine vinegar four parts, digest them five dayes, then distill them in Balneo.

This being taken to the quantity of two spoonfull or three causeth easie Vomiting.

A distilled water that purgeth without any pain or griping.

Take of Scammony an ounce, Hermodactyls two ounces, the seeds of Broom, of the lesser Spurge, of Dwarf Elder, of each half an ounce, the juice of Dwarf Elder, of wild Asses cucumber, of black Hellebore, the fresh flower of Elder, of each an ounce and half, Polypodium 6 ounces, of Senne 3 ounces, Red sugar 8 ounces, common distilled Water 6 pints.

Let all these be bruised, and infused in the water 24 hours, then be distilled in Balneo.

This water may be given from 2 drams to 3 ounces and it purgeth all manner of humours, opens all obstructions, and is pleasant to be taken, and they whose stomachs loath all other physick may take this without any offence.

After it is distilled there may be hanged a little bag of Spices in it, as also it may be sweetned with sugar, or any opening syrup.

A specificall Liquor against the tooth-ach.

Take of oil of Cloves well rectified half an ounce, in it dissolve half a dram of Camphire, add to them of the Spirit of Turpentine four times rectified, in which half a dram of Opium hath been infused, half an ounce.

A drop or two of this Liquor put into a hollow tooth with some lint easeth the tooth-ach presently.

For the cure of the tooth-ach.

Take of oil of Cloves well rectified half an ounce, in it dissolve half a dram of Camphire, add to them of the Spirit of Turpentine four times rectified, in which half a dram of Opium hath been infused, half an ounce.

OF MINERALS.

BOOK III.

Spirit of Salt is made thus.

TAke of the best Bay-salt as much as you please, let it be dissolved in spring water, and filtered, mix with this brine in a Copper vessell, of the powder of Bricks or Tiles twice or thrice as much as the Salt before its dissolution was in weight; let the water vapour away over the fire (continually stirring of it) untill it be dry; Then put this powder into a glass Retort well luted, or an earthen Retort, and put it into a Furnace (a large Receiver joined to it according to art) then give fire to it by degrees untill it will bear an open fire, for the space of 12 hours. Thou shalt have a very acid oil or spirit in the Receiver. That Liquor being put into a little Retort in Sand may be rectified by the vapouring away of the flegm; then keep it for use in a glass very well stoppt that no air goe in.

Spirit of Salt is very good in Feavers putrid, also in Hydropicall.

A Retort and its Receiver before they be set on work.



A Retort with its Receiver, set on work.



Oil or Spirit of Salt may also be made after this manner.

Take one part of Salt, and three parts of powder of Bricks or Tiles, and mix them together, and put them into a Retort either of glass or earth, to which put fire as before.

After this manner you may make oil or spirit of

Nitre
 Salt Gem
 Alum.

Note that these Salts must first be calcined, which is done by exhaling their flegm.

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To turn Salt-peter into a water by a meer digestion.

Take of Salt-peter powdered very small, with it fill the fourth part of a Bolt-head, close it well, and let it stand in the heat of ashes or sand the space of six weeks, and you shall see good part of it turned into water; continue it in the said heat till it be all dissolved.

This is of incomparable use in Feavers and against Worms or any putrefaction in the body, and indeed a most rare secret.

Spirit of Salt-Armoniack,

Dissolve Salt-Armoniack in distilled spirit of Urine over a moderate heat, in this spirit let Bricks beaten into small pieces and made red hot be quenched, till they have imbibed all the water, then make Distillation in a Retort in sand, or in a naked fire.

This spirit is of greater strength then that is of other Salts.

Oil or Spirit of Vitriall is made thus.

Take of Hungarian, or the best English Vitriall, as much as you please, let it be melted in an earthen vessel glazed, with a soft fire, that all the moisture may exhale, continually stirring of it, untill it be brought into a yellow powder, which must be put into a glasse Retort well luted, or an earthen Retort that will endure the fire: Fit a large Receiver to the Retort and close the joints well together, then give it fire by degrees till the second day, then make the strongest heat you can till the Receiver which before was dark with fumes be clear again; let the Liquor that is distilled off be put into a little Retort, and the flegm be drawn off in sand, so will the oil be rectified, which is most strong and ponderous, and must be kept by it self.

Many call that flegm which is drawn off in rectifying the spirit of Vitriall.

This oil or spirit is very excellent in putrid Feavers, resisting
L putrefaction

putrefaction, also it opens all obstructions, and is very diuretical.

A red and heavie oil of Vitriall.

Take of calcined Vitriall one part, flints grossely powdered two parts, of these with spirit of wine make a Paste, distill it in a Retort, and there will come forth a red heavy oil.

This is to be used rather about metals then in the body, only if the scurfe on the head be annointed therewith two or three times in a week it will fall off, and the head be cured.

To dulcifie the Spirit of Vitriall, and of Salt.

Take the spirit of Vitriall, or of Salt, the best spirit of wine, of each half a pound, distill them in a Retort together three or four times, and they will be united inseparably, and become sweet.

Some put 8 ounces of the best Sugar-candie to these Spirits before they be thus distilled.

Ten or twenty drops of this compound spirit being taken in any appropriated Liquor is very good in any putrid or Epidemicall disease.

Gilla Theophrasti, or a most delicate vomiting Liquor made of Vitriall.

Take of Crystals made out of Copper, or Iron, dissolve them in the acid flegm that first comes forth in the distilling of common Vitriall; circulate them eight days.

This Liquor must be taken in wine, and it causes vomiting instantly, and is most excellent to cleanse and strengthen the stomach and to cure all such distempers that arise from thence, as salt defluxions, Feavers, Worms, Head-ach, and Vertigoes, the Hysterical passion, and such like.

The Dose is from a scruple to two scruples.

Oil of Sulphur per Campanam.

Take a large iron vessel like a platter, over it hang a glass bell that hath a nose like the head of a cold stil, fill the lower vessel being narrower then the compass of the bell, or head, with brimstone, or sulphur, inflame it, so will the fume which ariseth from thence be condensed in the bell into a Liquor which will drop down through the nose into the Receiver. Note that the bell must hang at such a distance from the other vessell that the flame of the sulphur touch it not, according to this following example.



If in stead of this broad vessell, you take a large crucible and melt in it Salt-peter, and cast Sulphur upon it thus melted, you shall make a great deal quicker dispatch.

This spirit is of the same nature, and hath the same operations as oil of Vitriall.

The Oil of Sulphur is made after a more Philosophicall manner thus.

Take of crude Sulphur as much as you please, put it into a melting vessell to be dissolved over the fire: being dissolved, pour it forth into seething hot water (this done ten or more times, remembring that the water must be always seething hot) and thou shalt see that the Sulphur will be like butter, then put it into a Retort, pouring on it the best spirit of Wine, then distilling it with a soft fire, and there will come forth an oil of a golden colour, of a good taste and smell, which is the true Balsome of Sulphur. The oil that swims on the spirit must be separated.

This oil for the cure of all distempers of the Lungs, for all Feavers whether putrid or pestilentiall, and the cure of wounds and Ulcers, is scarce to be equalled.

The Essence of Sulphur.

Take of Sulphur vivum, as much as you please, dissolve it as well as you can in *Aqua fortis* (made of Vitriall and Salt-peter,) then evaporate the *Aqua fortis*, and then reverberate the matter till it become very red; Extract the tincture with spirit of Wine, then digest them till the essence be separated from the spirit like an oil, and sink to the bottome.

This Essence also is of wonderfull vertue against all putrefaction both inward and outward, a great preservative against the plague, and is wonderfull balsamicall, and cureth all sores both old and new, even to admiration.

The oil of Arsenick is made thus.

Take of Crystalline Arsenick (being first sublimed with Colophar alone as much as you please, mix it with an equal weight of the salt of Tartar and Salt-peter, and let them be betwixt two little pots or crucibles (whereof the upper hath a hole) calcined,

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ned, untill no fume ascend. The matter being thus calcined dissolve in warm water that you may draw a salt from thence; the powder which falls to the bottome imbibe with the liquor of Tartar, and dry it by the fire, and this thou must doe three times, then dissolve the matter in warm water that thou mayest draw out the Salt thereof, and there will remain a most white powder, and fixed, which in a moist place will be dissolved into a liquid matter like oil or butter.

Aqua fortis or a strong Spirit (that will dissolve silver and baser metals) is made thus.

Take of Vitriall calcined two parts, of Nitre one part, grind and mix them well together, and put them into a glasse Retort coated, or earthen Retort that will endure the fire, and set them into the Furnace in an open fire, and then having fitted a large Receiver distill it by degrees the space of 24 hours, then rectifie the water or spirit in sand.

Aqua Regia, or Stygia, or a strong Spirit that will dissolve Gold, is made thus.

Take of Nitre two parts, Salt Armoniack one part, the powder of flints three parts, put them into a glass Retort coated, or earthen Retort that will endure the fire, distill them by degrees over a naked fire for the space of 12 hours, take it out and rectifie it.

This water will dissolve gold.

Another Aqua regia is made thus.

Take of spirit of Nitre, as much as you please, put a dram of crude Nitre to every ounce of it, and it will be as strong as any Aqua regia.

This water will dissolve gold.

To make a most strong, and vehement *Aqua fortis*, take of the strongest *Aqua fortis* that you can get, and well rectified, a pound, of Mercury sublimed four ounces, salt Armoniack twenty ounces, mix all these together.

Oil or Butter of Antimony, is made thus.

Take of crude Antimony as much as you please, of sublimed Mercury a like quality, make them both into a very fine powder and mix them, and put them into a glass Retort, the neck whereof must be large. Give fire by degrees in a close reverberatory, or let the Distillation be made in sand. There will distill into the Receiver a fatnesse; part whereof sticking to the neck of the Retort will melt by a light fire being put to it. That fatnesse may be rectified in a Retort; and either be kept by it self as it is, or set in a cellar or moist place and be resolved into a Liquor.

This oil might be washed in good store of water, and then there will settle to the bottome a white powder, which being oft washed in fair water till all the sharpness is gone, is then called *Mercurius vite*, six or seven grains whereof is an excellent vomiting medicine.

A Furnace for a close Reverberation furnished with its Retort and Receiver.

A, Shews the Furnace.

B, The Retort.

C, The Receiver.

D, The Vessell filled with cold water.



How to make a water out of Antimony whereof a few drops shall purge, or sweat, and which bath neither smell or scarce any taste.

Take flowers of Antimony, sublime them with salt Armoniack six or seven times, then wash away the Salt with warm water, and dry the powder, which then lay thin on a Marble in a cellar till it be dissolved (which will be in six weeks time.) This water if it be taken to the quantity of twenty drops will purge, if in a lesser quantity it will sweat.

To make an oil or quintessence of Metals.

Dissolve what Metall, or Minerall you please, in a strong spirit of Salt (except silver which must be dissolved in Aqua fortis) draw off the flegm in Balneo, pour on rectified spirit of Wine, digest them so long till a red oil swim above, which is the quintessence of metals, and minerals, and is a very great secret.

The true Spirit of Antimony is made thus.

Take of the subtile powder of the *Regulus* of Antimony as much as you please, sublime it of it self til it will sublime no more (stil putting what is sublimed to that which remains at the bottom) or with salt Armoniack six or seven times (remembring that then you must dulcifie it with warm water by dissolving therewith the salt, and dry the Precipitate afterwards.) Set this fixed powder in a cellar, laying it very thin upon a marble stone and in about six weeks or two months it will all be dissolved into water, which must be filtered. Then evaporate part of this water and let it stand two or three dayes in the cellar to crySTALLize. These CrySTALS purifie, and dry. Mix them with three times the quantity of the gross powder of Tiles, and distill them in a Retort, and there will come forth first a white spirit, and then a red, which you may rectifie in Balneo.

The true Oil or Essence of Antimony is made thus.

Take of the foresaid CrySTALS, dissolve them in good rectified spirit of wine, digest them two months in *Balneo*, or horse dung: then evaporate the spirit of wine, and there will remain in the bottom the true oil or essence of Antimony.

Then take new CrySTALS of Antimony, and let them imbibe either this oil, or the foresaid spirit, till they will imbibe no more, then digest them two months in sand, and they will become a flowing fixt salt, and of excellent vertue.

The aforesaid spirit, this oil, and essence of Antimony may be equalized to *Aurum potable* to all intents and purposes, according to a Medicinall use, especially the fixt Essence. The dose is five or six grains.

A burning Spirit made out of Lead, most fragrant and Balsamick.

Take the Calx of Saturn, or esse Minium, pour upon it so much spirit of Vinegar that may cover it four fingers breadth, digest

digest them in a warm place the space of twenty four hours, often stirring them that the matter settle not too thick in the bottom: then decant the *Menstruum*, and pour on more, digest it as before, and this do so often untill all the saltness be extracted. Filter and clarify all the *Menstruum* being put together, then evaporate it half away, and set the other part in a cold place till it crystallize. These Crystals dissolve again in fresh spirit of Vinegar, filter and coagulate the Liquor again into Crystals, and this doe so often untill they be sufficiently impregnated with the salt Armoniack of the Vinegar as with their proper ferment. Digest them in a temperate *Balneo*, that they may be resolved into a Liquor like oil. Then distil this Liquor in sand in a Retort, with a large Receiver annexed to it, and well closed that no spirits evaporate, together with the observation of the degrees of the fire: then there wil distil forth a spirit of such a fragrant smel that the fragrancie of all flowers, and compounded perfumes are not to be compared to it. After Distillation when all things are cold, take out, and cast away the black feces which is of no use. Then separate the yellow oil, which swims on the top of the spirit, and the bloud red oil which sinks to the bottome of it: Separate the flegm from the spirit in *Balneo*. Thou shalt by this means have a most fragrant spirit that even ravisheth the senses; and so balsamical, that it cures all old and new sores inward and outward, and so cordiall that the dying are with admiration revived with it.

They that have this medicine need scarce use any other either for inward or outward griefs.

How to turn Quick-silver into a water without mixing any thing with it, and to make thereof a good Purgative and Diaphoretick medicine.

Take an ounce of Quick-silver not purified, put it into a bolt head of glass, which you must nip up, set it over a strong fire in sand for the space of two months, and the Quick-silver will be turned into a red sparkling Precipitate. Take this powder, and lay it thin on a Marble in a Cellar for the space of two months, and it wil be turned into a water, which may be safely

taken inwardly, it wil work a little upward and downward, but chiefly by sweat.

Note that you may set divers glasses with the same matter in the same Furnace, that so you may make the greater quantity at a time.

I suppose it is the Sulphur which is in the Quick-silver, and makes it so black, that being stirred up by the heat of the fire, fixeth the Mercury.

A fragrant oil of Mercury.

Take of Mercury seven times sublimed, and as often revived with unslaked Lime, as much as you please, dissolve it in spirit of Nitre in a moderate heat, then abstract the spirit of salt, and edulcorate it very well by boiling it in spirit of Vinegar: then abstract the spirit of Vinegar, and wash it again with distilled rain water: then dry it, and digest it two months in a like quantity of the best rectified spirit of Wine you can get. Distil them by Retort, making your fire moderate at the beginning, afterwards increasing it; then evaporate the spirit of Wine in *Balneo*, and there will remain in the bottome a most fragrant oil of Mercury.

This oil so purifies the blood by sweat and urine, that it cures all distempers that arise from the impurity thereof, as the venereal disease, &c.

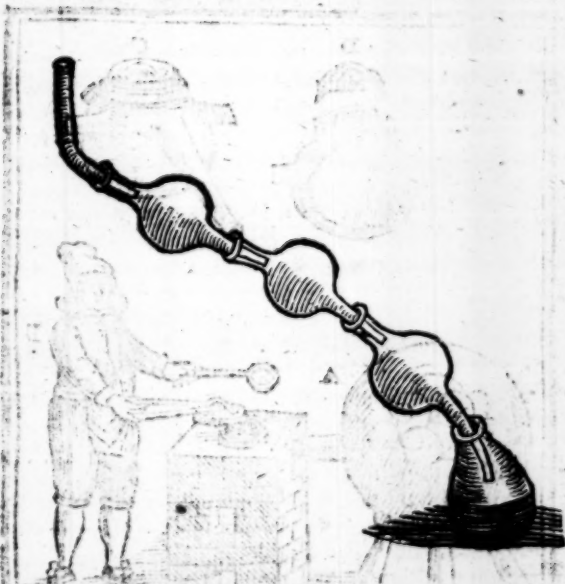
The truth is, they that have this medicine well made need but few other medicines: the dose is four or five drops.

To turn Mercury into a water by it self.

Set this following vessell being made of iron into a Furnace, so that the three bowls thereof be within the Furnace, and the Pipe and Receiver be without. Make your Furnace so as that there be a great hole left open at the top: where you must put in your coals, shutting it afterward with a cover of stone made fit thereunto; on the top also must be holes to let in air.

The

The Vessell for this Operation.



First make your Iron vessel as red hot as possibly it can be made (or else you do nothing) having first annexed an earthen well-glazed Receiver to the bottom of it. Then put half an ounce of Quick-silver at a time in at the top (which presently stop with clay) and presently the Mercury will come over, part in a sharp Liquor, and part as crude a Mercury as it was before, which you may put in again till it be all turned to water.

Note that unless the Quick-silver give a great crack presently after it is put in, it is a sign that the vessell was not hot enough.

This operation being well prosecuted may produce a medicine with which none under the Philosophers Elixir may compare.

How to distill Spirits, and Oils out of Minerals, Vegetables, Bones, Horns, and faster, and in a greater quantity in one hour then in the common way in twenty four. This must be done in such a Furnace as this.



A, Signifies the Furnace with its iron, or earthen distilling vessel walled in, to which a very large Receiver is joyn'd. B, the Distiller, who with his left hand taketh off the cover, and with his right casteth in his prepared matter with an iron ladle. C, the form of the distilling vessell. D, the same, as it appeareth inward. E, the form of the vessell not walled in but standing on the coals for other uses.

This Furnace must be twice so high as wide, and the pipe must be a foot long out of the Furnace.

The vessell walled in must be of earth for the distilling of Antimony, Sulphur, and such things as will corode iron : but for other things iron is most convenient.

Before you make any distillation, let the vessell which is walled in be red hot, then by little and little cast in your matter, which must be cut or powdered small, and clap down the cover into the false bottome above, which is full of molten lead, and therefore suffereth no fume to goe forth.

When you see the fumes in the Receiver (which must be of glass) to cease, and condensed into a Liquor, then put in more matter.

By this way you may make a far greater dispatch and distill a greater quantity out of the same proportion of matter, then by the common way.

By this way there is no danger of breaking your Receiver, and you may end and begin when you please, and try divers experiments in one hour, and cannot make the fire too strong, and may make the spirits of such things as can hardly or not so well be made by a Retort, as the spirits of Salt, of Tartar, Hartshorn, Antimony, &c.

Salt and such things as will flow must have a bole, or powder of brick mixed with them before they be cast into the vessell, or if you please you may first dissolve what salt you please, and with red hot gross powder of Brick, imbibe the water, then cast in this powder by little and little into the distilling vessell, and the Salt by this means will yeeld its spirit quickly and in abundance. By either of these two wayes you may make a pound of the spirit of Nitre in an hour, and of salt in two hours.

Now whereas some things yeeld a spirit, and a thick and heavy oil; they may be rectified thus, viz. by putting them into a Retort, and distilling them in sand or ashes with a gradual heat: there wil come forth the flegme of some Liquors first, and then the spirit; and of other some the spirit, and then the flegm, but of all these the heavy thick oil at last; which by distilling off becomes far clearer then before, which may again be rectified

by spirit of salt as I have shewed before, and therefore need not here repeat it.

To make an oil of Lapis Calaminaris.

Take of *Lapis Calaminaris* powdered, as much as you please, pour on it five or six times as much of rectified spirit of Salt, shake them together continually or else it will be congealed into a hard mass, which can hardly be mollified again: when no more will dissolve in *frigido*, put it in warm sand so long till the spirit of salt be of a high yellow colour; then pour it off and put on more till all be dissolved that will, cast away the feces, put the solution into a glass body, and distill it in sand: about the third part of the spirit of Salt cometh over as insipid as common water, though the spirit were well rectified before, for the driness of the *Lapis Calaminaris* (which is the driest of all Minerals and Metals except Zink) retaineth the spirit after the flegm is come over; let the glass cool, and thou shalt find at the bottome a thick red oil very fat, even as Olive olive, and not very corrosive; keep it from the air, or else it turneth into water.

It is of wonderfull vertue for inward and outward griefs, for it hath in it a pure golden Sulphur.

Common Sulphur mixed with this oil, and melted in a strong fire swimmeth like water above, and is transparent.

This oil distilled in a Retort with pure sand in a strong fire, yeeldeth a spirit like fire scarce to be contained in any vessel, and dissolveth all metals except silver, and reduceth pure spirit of Wine into an oyl within a few days.

To make oyl of Talk.

Take of the best Talk reduced into very thin flakes, make them red hot, and then quench them in the strongest *Lixivium* that Sope-boylers use; doe this fifteen times and it will become as white as snow: then powder it very small and calcine it by fumigation *i. e.* by the fume of some very sharp spirit as of *Aqua fortis*, or the like: when it hath been thus calcined for the

the space of a fortnight, it will become somewhat mucilaginous, then set it in any heat of putrefaction as it is (for it hath imbibed enough of the sharp spirit to moisten and ferment it) for the space of two months in a bolt head nipt up: then evaporate the acid spirit and dulcifie it with distilled rain water. After this extract what thou canst out of it with the best rectified spirit of Wine, pour off the solution and evaporate the spirit of Wine, and at the bottome will be a most beautiful oyl.

The oyl is the most glorious fucus or paint in the World.

To make oyl of Talk another way.

Take of the foresaid powder of Talk after it hath been putrefied, and again dulcified as much as you please, put four times as much of the best circulated oyl of Camphire to it, digest them in Horse dung till all the powder be dissolved, and the oyl become mucilaginous, which will be within two months.

This is for the same use as the former.

There is required a great deal of pains and care and no small cost in the preparation of these oyls.

Oyl is made of Bole Armoniack, terra sigillata, and such kind of clay earths, thus.

Take of either of those earths, as much as you please, break it into small pieces, and put it into a Retort over a naked fire for the space of 12 hours, and there will distill into the Receiver (which must be large) the flegm, then white Spirits in a little quantity, yet of a grateful taste and smell.

Oyl out of these kinds of earth is made better thus.

Take of either of these earths, which you please, as much as you will; pour upon it distilled rain water, set it in some warm place for a month or more, and the oylinefs will separate from its body, of its own accord, and swim upon the water. Separate the water by a tunnel, and distil the oyl with five parts of the spirit of Wine well rectified, and there will come forth an oyl of

oyl of a golden colour, swimming on the spirit which is a most excellent Balsame.

Spirit of unslaked Lime is made thus.

Take of unslaked Lime as much as thou pleasest; reduce it into a subtle powder, imbibe it with Spirit of Wine most highly rectified (which must be pure from all its flegm, or else yon labour in vain) as much as it can imbibe; draw off the spirit of Wine with a gentle heat, cohobate it 8 or 10 times, so will the fiery vertue of the Lime be fortified.——Take of this levigated Lime 10 ounces, pure salt of Tartar one ounce, the feces of Tartar after the salt is extracted 11 ounces; mix these well together, put them into a glass Retort coated, see that 2 parts of 3 be empty, distill them into two Receivers, the flegm into one, the spirit into the other, which must have a little of rectified spirit of Wine in it to receive the spirit.

If thou wilt separate the spirit of Wine, then put fire to it, and the spirit of Wine will burn away, and the spirit of the Lime stay behinde, which is a kind of a fixed spirit.

This is a very secret for the consuming the Stone in the bladder, and the curing of the Gout.

Oyl made out of Tile-stones, called the Oyl of Philosophers.

Take of Bricks or Tiles, as many as you please, break them into small pieces, make them red fire hot, then quench them in pure old Oyl Olive (in which let them lye till they be cold) then take them out and grind them very small, let the powder be put in a glass Retort, coated, a fit Receiver being put there-to and distil off the oyl in a naked fire by degrees, which being distilled off keep in a viall close stopd.

This oyl is wonderfull penetrating, and is good against all cold distempers whatsoever.

The Liquor or Water of Corall, is made thus.

Take Salt-Armoniack well purified by sublimation, of red Coral finely powdered, of each a like quantity; sublime them so often till the Corall will no more rise up, then take the Calx of Corall that remains in the bottome of the sublimatory and put it on a marble or glass in the cellar to be dissolved; that which will not be dissolved sublime again, and do as before till all be dissolved: and so thou hast the Liquor of Corall.

Note that if thou wilt have the true tincture of Coral, evaporate the humidity of the foresaid Liquor, then extract the tincture out of the powder with spirit of Wine, which spirit evaporate to the consistency of honey: and thou hast a most rare medicine.

This medicine strengtheneth all the parts in the body, and cures all distempers that arise from the weakness thereof.

To make a Water out of Lapis Armenus that shall have neither taste nor smell, a few drops whereof shal purge.

Take of *Lapis Armenus* powdered small, and calcined, as much as you please, sublime it with salt Armoniack until it will sublime no more but remain in the bottome of the sublimatory, then take it out, and lay it very thin upon a marble in a cellar, and there let it lye two months, and it will be almost all dissolved into a Liquor.

Or thus:

Take of *Lapis Armenus* powdered small and calcined, as much as you please, pour upon it of distilled Vinegar, as much as will cover it four fingers breadth, then set it over a gentle heat stirring of it two or three times in an hour, for the space of six hours or thereabouts; then the spirit being tinged very blew with the powder, filtre off from the feces, then pour more spirit of vinegar on the feces and doe as before, till the spirit be tinged no more, then take all the blew spirit and vapour, it

N

away,

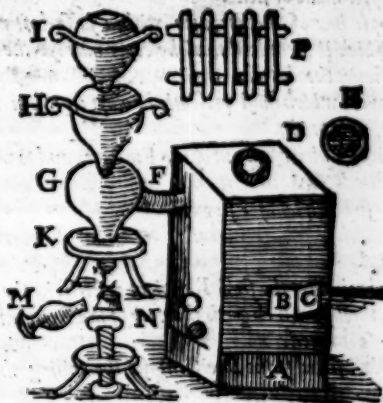
away, and at the bottome you shall have a salt, which you must put into a calcining pot, and calcine so long in the fire till no more vapour will arise, and it become a dark red powder, then put it upon a marble in the cellar for the space of two months, and it well be dissolved into a Liquor, a few drops whereof put into a glass of beer will purge delicately.

How to make a Furnace that shall of it self without any vessels which should contain the matter, being put into it, sublime Minerals, and distill all manner of Oils and Spirits out of Minerals, Vegetables, and Animals, and that in a very great quantity, in a very short time, and with small cost.

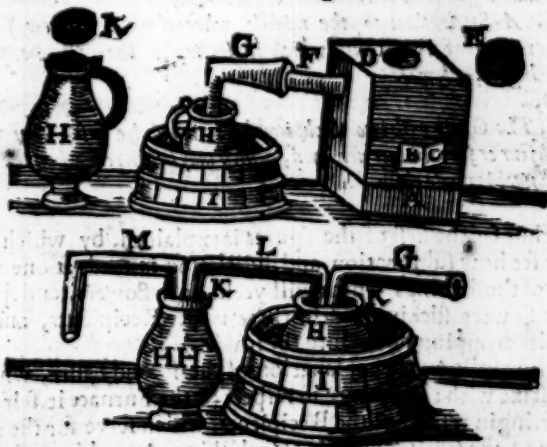
THe Furnace is made as followeth: It may be made of one piece by a Potter, or of brick, round, or four-square, greater or lesser as you please: if the inside be one span broad in the middle, it must be four high: one for the Ash-hole, another above the grate to the middle Coal-hole, and two above the Pipe; this pipe being made of earth or iron must be a span long betwixt the Furnace and the Receiver, and a third part as wide as the Furnace within.

The Recipients must be made of glass, or very good earth well luted together; the greater the better.

The



The second Figure.



A, Signifies the Ash-hole, which must be as wide as the Furnace, and
always open that the fire may burn the stronger.

- B, The middle hole of the Furnace for the putting in of coals.
 C, The stopple made of stone.
 D, The upper hole of the Furnace with a false bottom wherein sand lyeth, which is there laid that the cover may lye the closer and keep in the fumes the better.
 E, The Cover, which must presently be clapt on as soon as the matter to be distilled is put in.
 F, The Pipe, which goeth out of the Furnace, and to which the Receiver is fitted.
 G, The first Recipient for flowers.
 H, The second.
 I, The third.
 K, A Stool whereon the first Recipient resteth, in the midst whereof is a hole, through which goeth the neck of the Recipient, to which another glass is fitted.
 L, The Glass fitted to the Recipient for the uniting the spirits that drop down.
 M, Another Recipient united to the former glass, and into which the united spirits do run.
 N, A Stople through the middle whereof goeth a screw for the raising of that Glass which is set under the first Recipient, higher, or lower.
 O,
 P, The Grate with two thick iron bars, which lye fast, upon which four or five thinner are layed, which may be stirred when the Furnace is made clean.

Thus far the first of the figures is explained, by which you may see how sublimation and distillation is made at one time, viz. of those things which will yeeld both flowers, and spirits, (the flowers sticking in the three upper Recipients, and the spirits dropping down into the lower.)

Now follows the explanation of the second figure, which is the same with the former in respect of the Furnace it self, but differing in respect of the Recipients, which serve for the receiving of the spirits and oyls of such things as yeeld no flowers. Therefore I shall begin with the explanation of the Receivers.

G, The

G, The first crooked pipe as it is fitted to the pipe that comes out of the Furnace.

H, The-Recipient with its cover, in which is one hole for one crooked pipe to go through, as you may see in the first H, and two holes for two pipes to go through, as you may see in the second H, and in H H.

Note that these pipes may either be fastned to the cover being all of one piece, or they must be wel luted, that no vapours may pass through. Now you must conceive that in the lower Receivers the vapour that goeth out of the first pipe goeth first into the Receiver, then out of that into the next pipe, and so forward till it cometh into the last Receiver, by which means it is much cooled (for indeed such vapours that come out of the Furnace, especially when some materials are distilled, if there were not some such art to cool them, would break all Recipients.)

I, A tub of water, wherein the Recipient stands, to cool the vapours and condense them.

K, The first crooked pipe as it goeth into the Recipient.

L, The second crooked pipe, whereof one end goeth into one Receiver, and another end into another.

M, The last crooked pipe to which you must annex a Receiver.

Now the manner of distilling is thus; Let the Furnace be full of coals wel kindled, then cast on your matter, and stop your Furnace close: This Furnace needs no Retort, or other vessels to set into it, neither can you doe any hurt by too much or too little fire, and you may finish your operation when you please, and in one hour try divers experiments. It saveth very much time and cost, and in one hour will doe as much as can be done in another Furnace in 24. In one hour you may make a pound of spirit of Salt with four or five pound of coals, and as much flower of Antimony in a like space of time, and with a few coals.

If your materials be vegetables, or horn, or bones, cut them small; If hard Minerals, let them be powdered very small; if salts,

salts, let them first be dissolved in water, which water must be imbibed with red hot coals until all the liquor be imbibed: then cast in those coals into the Furnace.

If you would by this means procure the spirit of hard Minerals, as of Antimony, &c. you must take them as they come from the Mine before they have passed the fire.

By this Furnace you may make the spirits of such things which will not yeeld them in any other way.

Note that such oyls and spirits as are drawne by this Furnace must be rectified in spirit of Salt, as I have above shewed.

Ros Vitrioli is made thus.

Take of the best Danick Vitriall, as much as you please, uncalcined, put it into a glass gourd and distill it in the sand, and there will come over a water somewhat sharpish.

This Water or *Ros* is of greater use then the spirit or oyl thereof.

It helpeth all inward inflammations, as of the Liver, Kidneys, Stomach, helps the ebullition of bloud, and all distempers that come from thence.

This is that flegm, which most vapour away, but it is because they know not the vertues thereof.

A sweet green oyl of Vitriall is made thus.

Take as many Copperas stones as you please, beat them small, and lay them in a cool cellar, and in twenty or thirty days they will attract the air, and look black, and after fourteen days become whitish and sweetish, then dissolve them in distilled rain water, then filter and evaporate the water, and they will shoot into green Crystals, which you may dissolve in a Cellar *per deliquium*, being first beaten small, and layed on a marble stone.

This liquor is that famous medicine of *Paracelsus* for the falling sickness, a few drops thereof being taken in any appropriated liquor.

Take

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Take heed that it come at no strong fire, for then saith *Paracelsus* it loseth its greenness, and as much as it loseth of that, so much also of its vertue.

A spirit may be drawn from hence by an ingenious Artist, that will smell like Musk, or Amber.

The Sulphur of Vitriall may with spirit of wine be extracted thus.

Take of the best Danick Vitriall half a pound, dry it by a gentle fire till it be whitish, then pour on it of the best rectified spirit of Wine thirty ounces: (Note that there must come to it no other moisture then the spirit of Wine, the glass also must be very dry, else you labour in vain) then digest it in horse dung the space of a month, then decant from the feces the spirit of Wine without any troubling of it, then in *Balneo* evaporate the spirit, and at the bottome you will have a yellow liquor of a most wonderfull stipticity.

This liquor is a famous Anodynum, suppressing all noxious vapours whatsoever and causing rest.

A few drops there may be taken in any specifical Liquor.

A Sudorificall Water to be used outwardly.

Take of sublimed Mercury very finely powdered an ounce and half, of Euphorbium powdered a scruple, spirit of Wine well rectified, and Rosewater, of each a pound, digest them two or three hours in a gentle *Balneo*, the neck of the vessell which must be very long being wel stoppt, then let them boill a quarter of an hour: when the liquor is cold pour it from the feces, and keep it in a glass.

If the back bone be bathed with this Water, or the wrist of those that be weak, it causeth sweat presently, if it be done in the bed. By which means diseases that require sweat may be cured. Also any pained place by being bathed with this Water is in a little time eased.

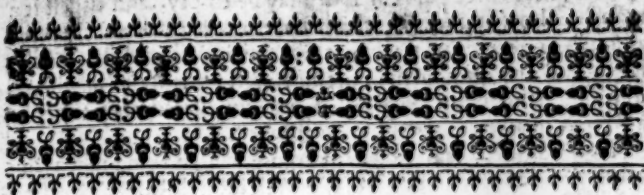
Note that you must not bathe any place above three or four times with it, for by being too often used it contracts the skin.

How

How to rectifie Oyls and Spirits of Minerals.

Put the Liquor that is distilled from Minerals into the Retort, to which give fire by degrees, and the spirit will rise up into the upper Receiver, and the heavy oyl will go into the middle Receiver which is the biggest of all; and into the little Receiver annexed to the end of the middle, will pass some of the spirit, which though it passeth into the middle Receiver, will not stay there, but goeth beyond it because it finds vent.





Of ANIMALS.

BOOK IV.

*Waters, Spirits, and Oils, simple and compound
out of Animals.*

Oyl and Water out of Bloud is made thus.



Take of bloud as much as you please, let it stand in putrefaction in a glass vessell close covered the space of forty days, then distil it in ashes, and there wil come forth a water and oyl; extract the salt out of the feces with the said water, calcine the salt in a crucible, and then dissolve it in the said water, and then distil off the water (which will be a good rectifying of the water) and dry the salt very well, which then mix with the foresaid oyl being first rectified, and digest them both together for the space of a month.

To make the Magistery of bloud.

Take of the purest bloud as much as you please, put it into a
O Pelican,

Pelican, that three parts of four may be empty, and digest it a month in horse dung (in which time it will swell and become as much more as it was when it was put in) then distil off the flegm in Balneo, and in the bottome will remain the magistery of bloud, which must be distilled, and cohobated nine times in a Retort in ashes, and then it is perfected.

This Magistery is of excellent vertue, which being taken inwardly and applyed outwardly, cureth most diseases, and easeth pain, being very balsamicall.

Elixir of Mummie is made thus.

Take of Mummy (*viz.* of mans flesh hardened) cut small four ounces, spirit of wine terebinthinated ten ounces, put them into a glazed vessell, (three parts of four being empty) which set in horse dung to digest for the space of a month, then take it out and expresse it, let the expression be circulated a month, then let it run through *Manica Hippocratis*, then evaporate the spirit till that which remains in the bottome be like an oyl, which is the true Elixir of Mummy.

This Elixir is a wonderful preservative against all infections, also very balsamicall.

The essence of mans brains.

Take the brains of a young man that hath dyed a violent death, together with the membranes, arteries, veins, nerves, al the pith of the back, bruise these in a stone mortar til they become a kind of pap, then put as much of the spirit of wine, as will cover it three or four fingers breadth: then put it into a large glass that three parts of four be empty, being hermetically closed, then digest it half a year in horse dung, then take it out and distill it in Balneo, and cohobate the water til the greatest part of the brains be distilled off.

A scruple or two of this essence taken in some specificall water once in a day, is a most infallible medicine against the falling sickness.

BOOK IV. *Of the Art of Distillation.*

A famous spirit made out of Cranium humanum.

Take of *Cranium humanum* as much as you please, break it into smal pieces, which put into a glasse Retort well coated, with a large Receiver well luted, then put a strong fire to it by degrees continuing of it till you see no more fumes comes forth; and you shall have a yellowish spirit, a red oyl, and a volatile salt.

Take this salt and the yellow spirit and digest them by circulation two or three months in Balneo, and thou shalt have a most excellent spirit.

This spirit is of affinity with, if not the same as that famous spirit of Dr. Goddards in Holborn.

It helps the falling sickness, gout, drop sic, infirm stomach, and indeed strengthens all weak parts, and openeth all obstructions, and is a kinde of Panacea.

Another excellent spirit made out of Cranium, Harts horn, or Ivory.

Take of either of these, (if you take Cranium it need not be bruised at all, only broke into little pieces; if Harts horn or Ivory, you must cut them in thin pieces) lay it piece by piece upon a net spread upon any vessell being almost full of water, cover this net with another vessell very close, then make the water boyl, and keep it boyling three dayes and three nights, and in that time the bones or horns, will be as soft as cheefe; then pound them, and to every pound thereof put half a pound of Hungarian vitriol uncalcined, and as much spirit of wine as will make them into a thin paste. This paste digest in a vessell hermetically sealed the space of a month in Balneo, then distil it in a Retort in sand till all be dry, and you shall have a most excellent spirit.

This spirit is of wonderful use in the Epilepsie, Convulsions, all Feavers putrid or pestilential, passions of the heart, and is a very excellent Sudorifick.

This spirit may be taken from the quantity of half an ounce to an ounce in some specificall liquor.

A Water and Oyl made out of Hair.

Fill an earthen Retort with hair cut small, set it over the fire, and fit a Receiver to it, and there will come over a very stinking Water and Oyl.

This water and Oyl is used in Germany to be sprinkled upon fences and hedges to keep wild and hurtfull Cattle from coming to do harm in any place, for such is the stink of this liquor that it doth affright them from coming to any place near it.

Water of Milk is made thus.

Take of what Milk thou please a gallon, in it dissolve half a pound of salt, and put to it two handful of Plantain, and an ounce of Licorish sliced, then distil it in a hot Stil with a gentle fire.

This water is of excellent use in hot distempers of the Lungs and Kidneys.

You may put in other ingredients according to the use you would have it for.

An excellent compound water of Milk for any inflammations in the eyes.

Take of womans milk a pint, of white Copperas a pound; distil them in ashes. Note that as soon as thou perceivest any sharp spirit to come off, then cease.

Let inflamed eyes be washed three or four times in a day with this water, and it helpeth them wonderfully.

Spirit of Urine is made thus.

Take of the Urine of a young man drinking much wine, as much as you please, let it stand in glass vessels in putrefaction 40 dayes, then pouring it from its feces distil it in a glass gourd in sand, til all be dry, then cohobate the said spirit on the *Caput Mortuum* three times, then distill it in a gourd of a long neck, and there will ascend besides the spirit a crystalline salt, which

which thou mayest either keep by it self, being called the volatile salt of Urine, or mix it with its spirit which will thereby become very penetrating, if they be digested for some days together.

Note that the pipe of the head must be wide, or else the volatile salt will soon stop it.

Note that this salt is so penetrating that it penetrateth the body of the glass.

This Spirit by rectification may be made so pure and subtle, that it will burn as fire, and dissolve gold and precious stones.

This being often applyed to any place pained with the gout, easeth it presently, it also quickens any part that is benumbed.

The salt volatile is *Helmonts* famous Medicine for the Jaundies.

A compound Spirit of Urine.

Take of Hungarian Vitriall a pound, the Urine of a Boy that is healthy, four pints: put these into a glass vessel well closed that three parts of four may be empty; digest them in Balneo for the space of a month; then distil them in ashes till all be dry.

This spirit is of great vertue in the Epilepsie, Gout, Dropfie, Convulsions, being taken from two drams to half an ounce in some specifical Liquor.

To make a spirit of Honey.

Take good strong stale Mead, otherwise called Metheglin, as much as thou pleasest, distil it in a Copper Stil or Alembick, with its refrigeratory, and it wil yeeld a spirit like *Aqua vite*.

The quintessence of honey is made thus.

Take of the purest Honey two pound, of Fountain water one pound; boyl these together til the water be boyled away, taking off all the scum that riseth, then take the Honey.

ney and put it into a glass, four parts of five being empty, close it well, and set in digestion a whole year, and thou shalt have the essence of Honey swimming on the top in form of an Oyle, being of as fragrant smel as any thing in the World; the flegm will be in the middle, and the feculent matter in the bottome, of a dark colour, and stinking smel.

Some make the quintessence of Honey after this manner.

Take as much Honey as thou pleasest, of the best, put it into a gourd of glass, first distil off the flegm in *Balneo*, then extract the tincture out from what remains, with the said water, then calcine the remaining feces and extract from thence the salt with the foresaid water being distilled off from the tincture, calcine the salt and melt it in a crucible, then let it dissolve in a cellar; then again evaporate it away, and thou shalt have a most white salt, which let imbibe as much of the tincture as it will; digest them for three months, and thou shalt have an essence of Honey.

An essence of Honey may be made thus.

Take of Honey wel despumated as much as you please, pour upon it as much of the best rectified spirit of Wine as will cover it five or six fingers breadth, digest them in a glass vessel wel closed (the fourth part only being full) in a temperate *Balneo* the space of a fortnight, or til the spirit be very wel tinged, then decant off the spirit and put on more til all the tincture be extracted, then put all these tinctures together, and evaporate the spirit till what remains begin to be thickish at the bottome and of a golden colour.

This is a very excellent essence of Honey, and is of so pleasant an odour that scarce any thing is like to it.

It is so cordial that it even revives the dying if two or three drops thereof be taken in some cordial water.

A most strong Spirit of the Vinegar of Honey.

Take a pound of Honey, put to it of the best White wine Vinegar six pints, an ounce of white Pepper bruised smal, of the strongest Mustard-seed bruised three ounces, put these into a glass vessel that three parts of four may be empty, digest them in a temperate *Balneo*, or set the vessell in the sunne for the space of a fortnight, then distil them in *Balneo*, and thou shalt have a spirit farre sharper then the common spirit of Vinegar.

This spirit is stronger, and better then any common distilled Vinegar for the dissolving of hard things, and extracting the tinctures out of things.

Oyl or quintessence of Wax.

Take of the best Wax a pound, as much of pure sand well washed from al its impurity, and again dryed; First melt the wax, and then mix the sand with it very exactly, then put them into a glass Retort well coated, fit a strong Receiver to it, and set it in sand, give it fire by degrees, continuing it four days, which at last must be very strong, and there wil come off a spirituous oyl, which must be rectified seven times in a glass Retort, every time changing the Retort, and you shal have a subtile oyl of a golden colour.

This oyl extracts the vertues out of all flowers presently, being set in the sun, it is wonderful Balsamical for the cure of wounds or ulcers both inward and outward, it also being applied outwardly easeth all pains, quickens any deadened member, as in the palsie.

Water is made out of any flesh thus.

Take what flesh you please, the bloudest part thereof, unwa- shed, being cut very smal, and then bruised (or if it be a feathered fowl, take it being chased up and down until it be wearyed, and then suddenly strangled, the feathers being plucked off with- out

out putting of it into water; and being thus plucked bare, and the bowels taken out, cut the flesh, bones, gizzard, liver, heart,) and pour upon it as much water as will be sufficient, with what spices and hearbs thou pleassest, then set it over a gentle fire in an earthen vessel glazed the space of 24 houres, then put the head upon it and lute it close, and there wil distil off a comfortable restorative water.

Water or Liquor is made out of flesh thus.

Take of what flesh you please, or feathered fowl prepared as before, bruise it smal, and put it into a copper vessel tinned within side, without any water being put to it, put a cover to it and lute it close, and set it in *Balneo*, or over the vapour of seething water, and if the flesh be tender it will be turned into a clear liquor the space of 12 hours, if harder it will require a longer time: You may put in what spices or hearbs you please to giue it a good relish and odour; after all is done you may strain it and keep it for use being very restorative and good for weak stomachs that cannot concoct hard meat.

If this be digested in a Pelican, or bolt head a fortnight, it will be far better.

After this manner may be preserved

§ Snails

§ Worms, and such like:

which are very medicinable.

A very excellent restorative Liquor.

Take of the heart, lungs, and liver of a Calf, the same parts of a Fox new killed, cut them smal, put to them a quart of Shel Snails wel scoured in salt water; let them be put into a copper vessel tinned within side, and covered close that no vapour come forth, set this vessel over the vapour of seething water, and in 24 hours or thereabouts, they will be for the most part of them turned into a Liquor of themselves; then take out this Liquor and put it into a large Pelican, or Bolt-head, putting to them a quart of old Mallago wine, Rosemary flowers, Betony

Betony-flowers, Marygold flowers, Marsh wallow-flowers, of each a handful, half a pound of Raisins of the Sun stoned, Mace and Nutmeg of each two drams: digest all these together the space of a fortnight, then pour off that which is clear from the feces and sweeten it with sugar, or syrup of Gilly flowers, and let the Patient thereof five or six spoonfuls, three or four times in a day.

This Liquor recovereth the decaying strength wonderfully; they that by reason of their weakness, can neither eat or digest any manner of common meat, will in a short time be sensibly strengthened if they drink a quarter of a pint of this morning and evening.

It is very good in consumptions, and repairs the radical moisture marvellously.

A Balsame made of Bears fat.

Take of Bears fat a pound, distil it in a Retort, and rectifie it three or four times: to this thus rectified put the tincture of Rosemary and Sage made with spirit of Wine, of each three ounces, mix them wel together, in these infuse Cloves, Cinnamon, Saffron, Nutmegs, of each three drams, in warm ashes the space of a night, then strain them and put to the oyl four ounces of the best wax melted, and mingled wel together.

This is a most incomparable balsame for the Gout, and Palsie.

The Oyl of Snakes and Adders.

Take Snakes or Adders when they are fat, which will be in June or July, cut off their heads and take off their skins, and unbowel them, and put them into a glass gourd; and pour on so much of the pure spirit of Wine wel rectified, that it may cover them four or five fingers breadth; stop the glass wel, and set it in *Balneo* til all their substance be turned into an oyl, which keep wel stoppt for your use.

This oyl doth wonderfull cures in recovering hearing in those that be deaf, if a few drops thereof be put warm into the

A Noble man of Germany that was famous for curing the deaf used this as his chiefest medicine, by which they say he cured those that were born deaf.

The Quintessence of Snakes, Adders, or Vipers.

Take of the biggest and fattest Snakes, Adders, or Vipers, which you can get in *June* or *July*, cut off their heads, take off their skins, and unbowel them, then cut them into smal pieces, and put them into a glass of a wide mouth, and set them in a warm *Balneo*, that they may be well dried, which wil be done in three or four days. Then take them out, and put them into a bolt head, and pour on them of the best alcolized Wine as much as wil cover them six or eight fingers breadth. Stop the glass hermetically, and digest them fifteen days in *Balneo*, or so long til the Wine be sufficiently covered, which pour forth; then pour on more of the foresaid spirit of Wine til all the quintessence be extracted: Then put all the tinged spirits together: and draw off the spirit in a gentle *Balneo*, til it be thick at the bottome, on this pour spirit of Wine Caryophyllated, and stir them wel together, and digest them in a Circulatory ten days, then abstract the spirit of Wine, and the quintessence remaineth at the bottome perfect.

This quintessence is of extraordinary vertue for the purifying of the bloud, flesh, and skin, and consequently of all diseases therein. It cures also the Falling-sickness, and strengthens the brain, sight, and hearing, and preserveth from Gray hairs, reneweth Youth, preserveth Women from Abortion, cureth the Gout, Consumption, causeth sweat, is very good in, and against pestilential infections.

Viper wine is made thus.

Take the best fat Vipers, cut off their heads, take off their skins, and unbowel them, then put them into the best Canary Sack; four or six according to their bigness, into a gallon: Let them stand two or three months, then draw off your wine as you drink it.

Some

Some put them alive into the Wine, and there suffocate them, and afterwards take them out, and cut off their heads, take off their skins, and unbowel them, and then put them into the said Wine again, and doe as before.

This Wine hath the same vertue as the foregoing quintessence, it also provoketh to Venery, and cures the Leprosie, and such like corruption of blood.

Kunrath's famous Water, called *Aqua Magnanimitatis*. ✓

Take of Pismires or Ants (the biggest, that have a sowerish smel, are the best) two handfulls, spirit of wine a gallon, digest them in a glass vessel close shut the space of a month, in which time they wil be dissolved into a Liquor, then distil them in *Balneo* til all be dry. Then put the same quantity of Ants as before, digest and distil them in the said Liquor as before: doe this three times, then aromatize the spirit with some Cinamon.

Note that upon the spirit will float an oyl, which must be separated.

This spirit is of excellent use to stir up the Animal spirit: in so much that *John Casimire* Palsgrave of the *Rhene* and *Seyfried* of *Collen*, Generall against the Turks, did always drink of it when they went to fight, to encrease magnanimity and courage, which it did even to admiration.

This spirit doth also wonderfully irritate them that are slothfull to Venery.

It also provoketh Urine even to admiration.

It doth also wonderfully irritate the spirits that are dulled, and deaded with any cold distemper.

This oyl doth the same effects, and indeed more powerfully.

This oyl doth besides what is spoken of the spirit, help deafness exceedingly, two or three drops being dropped into the ear after it is wel syringed, once in a day, for a week together.

It helpeth also the Eyes that have any film growing on them, being now and then dropped into them.

Another Aqua Magnanimitatis is made thus.

Take of Ants or Pismires a handful, of their Eggs two hundred, of Millepedes *i.e.* Wood lice one hundred, of Bees one hundred and fifty, digest all these in two pints of spirit of wine being very well impregnated with the brightest Soot. Digest them together the space of a month, then pour of the clear Spirit, and keep it sa'e.

This water or spirit is of the same vertue as the former.

Water of Dung is made thus.

Take of any dung as much as thou pleasest, whilst it is fresh, put it into a common cold Still, and with a soft fire distil it off; it will be best if the bottome of the Still be set over a vapour; if thou wouldst have it be stronger, cohobate the said water over its feces several times: for we see there is great vertue in dung, it makes ground fertil, and many sorts thereof are very medicinal.

A water of Doves dung is made thus.

Take of Doves dung dried as much as you please, to every pound put a pint of Rhenish wine, in which let it steep all night in a gentle *Balneo*, then distil it in a glass gourd in ashes: Cohobate this Liquor three times, if there be any volatile salt mix it with the water.

This water is very excellent against all obstructions of the kidneys, bladder, it helpeth the Jaundies presently, two or three spoonful thereof being drank once every morning, and evening.

A Water made of Horse dung.

Take of the dung of a horse that is fed in the stable as much as you please, let it stand two days out of the Sun, and out of the wet, to every pound of this pour a pint of white wine, let them stand

stand in a warm *Balneo* a fortnight; then distil them in a glass gourd in sand, cohobate this three or four times, if there be any volatile salt, mix it with the water.

This Water is very excellent against the bastard pleurisie, stitches, wind, obstruction of the reins, bladder, very good in a dropsie, jaundies, scurvy, &c. It three or four spoonfuls be taken every morning in the water of Juniper berries, it also causeth sweat.

A Water smelling like Amber, made by Paracelsus out of Cow dung.

Take of Cow dung and distil it in *Balneo*, and the water there- of will have the smell of Amber gryse.

This water is very excellent in all inward inflammations.

An excellent Sudorifick made of the young-buds of Harts horn.

Take of the young buds of Harts horn, whilst they are full of blood and moist; bruise them into a paste, then mix as much Canary wine as will make a very thin paste, distil them in ashes till they be very dry.

This is an excellent Sudorifick in all burning Feavers and Epidemical diseases; if a spoonful be taken by it self, or in any appropriated Liquor.

Oyl out of Bones and Horns; is made thus.

Take of what bones you please, reduce them to a gross powder, put them into a Retort, putting a strong fire by degrees thereunto; and there will come forth an oyl, and volatile salt, both which thou mayest mix together, and digest them into an essence, the oyl being first rectified with spirit of wine.

The Water of Swallows against the Falling sicknesse.

Take of Swallows, cut them into pieces without separating any thing from them, six ounces, of Castoreum cut small an ounce, mix them together, infuse them 12 hours in half a pint.

of Canary wine; then put them into a glass gourd and distill them in sand till all be dry, then cohobate the Liqueur three times.

This water being drank to the quantity of two spoonfull every morning, cureth them that have the Falling sickness.

Oyl out of Eggs is made thus.

Take of the yolks of eggs boyled very hard, rub them in pieces with your fingers, then fry them in a pan over a gentle fire, continually stirring them with a spoon til they become red, and the oyl be resolved, and flow from them; then put them into a hair cloth, and so presse forth the oyl.

This oyl cleanseth the skin from any filthinesse contracted by heat; it cureth pustles, chaps, excoriations, ring-worms, but especially all burnings.

A Water of the whites of Eggs that will cure a wound without any visible scarre.

Take as many eggs as you please, boyl them very hard, then cut them in the middle and take out the yolks, filling up the cavities with some of those whites being first bruised into a paste, then put both sides of the egg together as before, and tye them together with a thread, and with a string hang them in the middle of a gourd glass that they touch not the sides, stop this glass very close and set it in *Balneo*, and you shall see those whites which were bruised drop down into a Liqueur: which you must gather up out of the bottome of the glass, and keep.

You will have very little of this Liqueur.

This Liqueur applyed to any green wound with a feather cures it presently wheresoever it be, without any visible scar. It cures most wonderfully all wounds in the eyes.

A Water of Crabs is made thus.

Take Crabs or Craw-fish, as many as you please, break them to pieces, then macerate them in water of Sengreen for
the

the space of a day, then distil them, cohobate the water three times.

This Water is of singular vertue in all manner of inflammations inward and outward.

An Oylor Liquor is made out of Crabs eyes thus.

Take of Crabseyes very finely powdered five parts, oyl of Tartar *Per Deliquium* six parts (This oyl of Tartar must be made of salt of Tartar after it hath flowed in the fire) digest them in horse dung the space of a month, then coagulate the Liquor and make an extraction with the best rectified spirit of Wine that can be made (or else you lose your labour) then evaporate the spirit of Wine, and there remains an oyl at the bottome.

This oyl is of wonderful vertue in all putrid Feavers, and such like distempers, also in all obstructions, especially of the Kidneys.

Water of Spawn of Frogs is made thus.

Take of the Spawn of Frogs gathered in *March*, as much as you please, put a handful of Salt to every quart, and put them into a common cold Still and with a gentle fire distil off the water till no more will distill.

A compound water of the Sperm of Frogs.

Take of the sperm of Frogs gathered in *March* about the new of the Moon, four pound, of Cow dung fresh, six pound, mix them well together, and let them stand the space of a day, then distil them in ashes.

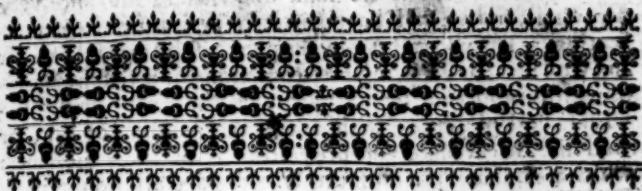
This water assays all hot pains both inward, and outward, especially of the Gout.

Another

Another compound water of the sperm of Frogs.

Take of the Sperm of Frogs gathered in *March*, two pound, and half, the Urine of a young man three pints, new Treacle two ounces and a half, white Vitriol, Salt, Allum, of each four ounces, then distil them, and put to the water an ounce and half of the Salt of Vitriall, Camphire, and Saffron, of each an ounce.

This water being applyed outwardly helpeth all pains, especially of the Gout, and such like, also allayeth hot or cold swellings; It also stancheth bleeding.



A Miscellany of Spagyricall *Experiments and Curiosities.*

BOOK V.

[*The Spagyricall Anatomie of Water.*



Water seems to be a body so very Homogeneall, as if neither Nature, or Art could discover any Heterogeneity in the parts thereof: thus indeed it seems to the eye of the vulgar, but to that of a Philosopher far otherwise, as I shall endeavor to make credible by presenting to your consideration a two-fold process of the discovering the dissimilarity parts thereof; whereof the one is naturall only, and the other artificiaall; But before I speak of either, it must be premised, that in the element of Water there is great plenty of the spirit of the World, which is more predominant in it then in any other element, for the use and benefit of universall nature; and that this spirit hath three distinct substances, *viz.* Salt, Sulphur, and Mercury.

Mercury. Now by salt we must understand a substance very dry, vitall, and radicall, having in it the beginning of corporification, as I may so call it: by Sulphur, a substance full of light and vital heat, or vivifying fire, containing in it self the beginning of motion: by Mercury, a substance abounding with radical moisture, with which the Sulphur of life, or vital fire, is cherished and preserved. Now these substances which are in the Spirit of the World make all Fountains, and Waters, but with some difference, according to the predominancy of either. This severall predominancy therefore is the ground of the variety of productions. I say, of productions, because all things are produced out of Water: for Water is both the Sperme, and the Menstruum of the World; the former, because it includes the seed of every thing; the latter, because the Sperme of Nature is putrefied in it, that the seed included in it should be actuated, and take upon it the divers Formes of things; and because by it the seed it self, and all things produced of seed grow, and are encreased: Now this being premised, I shall shew you what the naturall processe is, which I shall make plain by instancing in three severall productions, viz. of the spawn of Frogs, of Stones, and of Vegetables.

The Spawne of Frogs is produced after this manner, viz. The Sulphur which is in the Water, being by the heat of the Sun resolved, and dissolved, is greedily, and with delight conceived by the Element of Water, even as the Sperme of a Male is by the Matrix of the Female, and that upon this account. The Water wants siccity, which the Sulphur hath, and therefore exceedingly desiring it, doth greedily attract it to it self: Sulphur also wants humidity, and therefore attracts the humidity of the Water: Moreover the humidity of the Water hath the humidity of the Salt hid up occuldy in it: also the Sulphur cherisheth the humidity of the fire, and desires nothing more then the humidity of the Salt, that is in the Water. Sulphur also contains the siccity of the Salt, whence it is that Salt requires a siccity from the Sulphur. And thus do these attractive vertues mutually act upon each others subject.

ject. Now by this means there is a conception made in the water which now begins to be surgid, puffed up; and troubled, as also to be grosser, and more slimie, until out of the spermatick vessels the spermes be cast upward, in which spermes after a while appeare black specks, which are the seed of the Frogs, and by the heat of the Sun, are in a short time turned into the same; by which it appears there are dissimilary parts in Water.

2 Stones are produced out of Water that hath a Mucilaginous Mercury, which the Salt, with which it also abounds, fixeth into Stones. This you may see cleared by putting stones into the water, for they wil after a time contract a macellaginous slimy matter, which being taken out of the water and set in the Sun, becomes to be of a stony nature. And whence come those stones, gravel, and sand which we see in Springs? they are not washed down out of the Mountains and Hills (as some think) from whence the waters spring, neither were they in the earth before the Springs brake forth, (as some imagine) and now appear by washing away of the earth from them; for if you dig round about the springs, even beyond the heads of them, you shall find no stones at all in the earth, only in the veins thereof through which the water runs. Now the reason of the smallness of these stones, is the continual motion of the water, which hinders them from being united into a continued bignesse. I shall make a further confirmation of this in the artificial proceesse of manifesting the Heterogeneity of Water. I shall here only adde the assertion of Helmont, saying that with his Alchastick all stones, and indeed all things may be turned into Water? If so, then you know what the Maxime is, viz. All things may be resolved into that from whence they had their beginning.

3 Vegetables are produced out of Water, as you may clearly see by the Waters sending forth Plants that have no roots fixed in the bottome: of which first is the Herb called Duck-weed, which putteth forth a little string into the Water, which is as it were the root thereof. For the confirmation of this, that this Herb may be produced out of meer water

Water, there is a Gentleman at this time in the City, of no small worth, that saith he had fair water standing in a glass divers yeares, and at last a Plant sprang out of it. Also if you put some Plants, as Water-mint, &c. into a glass of fair water, it wil germinate, and shoot out into a great length, and also take root in the Water, which root will in a short time be so encreased, and extended, as to fill up the glass: but you must remember that you put fresh water into the glasse once in two or three dayes. Hereunto also may be added the experiment of *Helmont*, concerning the growth of a tree; For (saith he) I took two hundred pound weight of earth dried in an oven, and put it into a vessel, in which I set a Willow tree which weighed five pound, which by the addition of water to the earth, did in five yeares time grow to such a bignesse, as that it weighed one hundred sixty nine pound; at which time I also dried and weighed the earth, and within two ounces it retained its former weight. Besides, the ancients have observed that some Hearbs have grown out of snow being putrefied: and do not we see that all Vegetables are nourished, and increased with an inspid water, for what else is their juice? If you cut a Vine in the month of *March*, it wil drop divers gallons of inspid water, which water if it had remained in the trunk of the Vine, would in a little time have been digested into leaves, stalks, and grapes, which grapes also by a further maturation would have yeilded a Wine; out of which you might have extracted a burning spirit; Now I say although this inspid water be by the specificall Sulphur and Salt of the Vine fixed into the stalks, leaves, and grapes of the vine, yet these give it not a corporificative matter, for that it had before, and an aptitude and potentiality to become what afterwards it proves to be: for indeed stalks, leaves, and grapes were potentially in it before, all which now it becomes to be actually, by vertue of the Sun, and of the aforesaid Sulphur and Salt, whereof the two latter were originally in the smal seed, and therefore as I said could not adde any bulk to them.

Moreover doe not we see that when things are burnt and putrefied

putrefied, they ascend up into the air by way of vapour, and fume, and then descend by way of insipid dew, or rain: Now what do all these signifie but that from water are all things produced, and in it are dissimilary parts?

1 The artificiall processe is this: take of what water you please, whether Well water, Fountaine, River, or Raine water, as much as you please, let it settle three or four houres, untill the slime thereof separates it selfe: then digest it the space of a month; after which time evaporate the fourth part, by a very gentle heat, and cast it away being but the flegm, then distil off the remainder of the water till the feces only be left, which feces will be a slimy saltish substance: this middle substance distill again as before, casting away every time the fourth part, as flegme, and keeping the feces by themselves for a further use; and this doe seven times. Note that after the fourth or fifth distillation the water will distil over like milke, colouring the head of your Still so that it can hardly be washed or scoured off. This pure water after the seventh distillation will leave no feces behind: and if you digest it three months it will be coagulated into Stones and Cryssals, which some magnifie very much for the cure of inward, and outward putrefactions, out of which also may be made a dissolving spirit. Note that as this water stands in digestion you may see divers curious colours. Now as for the feces which I spake of (which indeed all waters even the sweetest leave at the bottome) being as I said a saltish slime, and in taste as it were a Medium betwixt Salt, and Nitre; take them and distill them in a Retort in sand, and there will first come forth a white fume, which being condensed descendeth in a straight line to the bottome, next will come over a red Oyl of great efficacy, exceeding the vertues of the spirit of Salt or Nitre. For confirmation of part of this processe, take May dew gathered in a morning (when it hath not rained the night before) and put it into a glass vessel, covered with a parchment pricked full of holes, and set it in the heat of the Sun for the space of four months, and there will store of green feces fall to the bottome, the residue of

the water being white and clear. Now by all this you may conclude what manner of dissimilarity there is in the parts of water. I shall adde but one observation more, and so conclude this subject.

Take a flint out of River water, and put it into a gourd glasse, poure upon it as much River Water as will fill the glasse, evaporate this water till the flint be drye, then poure on more fresh water, doe this so long till the flint will fill up the glasse, (for in a little time it will fill it up, and become to be of the forme or figure of the glasse) for it attracts to it selfe the mucilaginousnesse of the water, which indeed is a slimy saltish matter, and the true matter of Stones. And thus thou shalt have that done by Art in few dayes, which Nature would have been perfecting many yeares, and indeed just such a flint as is produced in the Rivers. Any one that should see this flint in the glasse would wonder how it should come in there. You may break your glasse and take out the flint.

There are divers such processes which may be used, but in effect they demonstrate but little more concerning the potentiall Heterogeneity of water, and therefore to avoid tediousnesse, I shall here end with the Anatomy of Water, concerning which if any one can make a further illustration; let him be candid and impart it, and I shall be glad to learn of him, and in the meane time let him accept of these my endeavours.

The Spagyricall Anatomy of Wine.

I Shall not speak here of the juice of grapes as being naturally divided into Wine, Tartar, and Lees, but of Wine as artificially divided into pure Spirit, Flegm, and Feces.

1 The spirit is that hot, subtile, pure, clear, cordiall, and balsamicall substance, which ariseth with a small heat after four or five distillations, being indeed but the twentieth part of the Wine. This spirit is not that inebriating substance of the Wine as most think, for a man may drink the spirit that is extracted out of ten pints of Wine without distempering of his brain at all, when as perhaps he would be distempered with drinking a pint or two of the Wine.

Now this spirit contains in it a subtile Armoniack, and essentiall Sulphur inseparably conjoined, which indeed are the life of the spirit, and may be separated from the Mercuriall or watery part thereof, which after separation of them remains insipid, but yet of wonderfull subtility. They may be separated thus: First rectifie the spirit as high as you can the ordinary way: then rectifie it once or twice in these following vessels.

Not 1c



Note that if there be any flegm remaining in the spirit, it will go no further then the middle Receiver, especially the second time. By this means thou shalt have so subtile a spirit, that unless it be kept in a vessell close stopt, it will flye away in the air. Then take of this spirit two ounces, and poure it upon six ounces of calcined Tartar before the salt be extracted, and mingle them well together; then distill it in *Balneo*, and there will come over an insipid water, which as I said before is very sub-

cle, then put on a like quantity of the said spirit, as before, and distil it off, and thus do so long til the water that comes over is not insipid, but the spirit comes over again hot as it was poured on: for by this time the fixed matter is glutted with the salt Armoniack, and Sulphur of the spirit. Then put this dried matter into a glasse sublimatory, and put fire to it, and there will sublime a Salt from thence even as Camphire is sublimed. This salt is the true essence of Wine indeed, and its vertues are wonderful, for there is no disease whether inward or outward that can withstand it. This is that essence of Wine of the Philosophers, which is so penetrating, so wonderful cordial and balsamical, which if thou doest once obtain, thou shalt need but few other medicines.

Now this spirit or *Aqua vite*, is in all Vegetables, as you may see in Malt, and Vegetables that are putrefied before they be distilled, which then yeeld a burning spirit; yet it is in Wine more then in any other Liquors: I say Liquors, for if you take eight gallons of Sack, and as much Wheat, which is a solid body, the Wheat being malted, will yeeld more *Aqua vite* then the Sack.

2 The flegm is that which remains after the spirit is distilled off, and is a putrid, insipid, cold, narcotick, and inebriating Liquor, debilitating the stomach and offending the head. A few spoonfulls of this will presently make a man drunk, nay the flegm of half a pint of Wine will make a man drunk, when as two pints of Wine it selfe would hardly doe it: whence you may collect what a great corrector of Malignant spirits, and vapours the spirit of Wine is; which, whilest it is mixed with the flegm before distillation, doth temper and correct this inebriating quality thereof, and as it doth thus, so also being given (I mean the pure deflegmated spirit) to them that are already inebriated, doth much allay their distemper. This flegm therefore being of so narcotick a quality is the cause of Palsies, and such like distempers.

Moreover it is to be observed that when this flegm is to be distilled off, there remains at the bottom a viscous corrosive matter, which by reason of its viscosity is the cause of obstructions, and by reason of its corrosivenesse the cause of the gout, colick, stones, &c.

3 This feces being distilled yeelds a sharp spirit, (and fetid oyl), which leave behind them a saltish substance, out of which when the salt is extracted, there remains an insipid earth.

Now if any shall object against what I have asserted, and say that *Aqua vite*, or spirit of Wine are inebriating, the causes of Palsie, stone, gout, colick, weak stomachs, and such like: as we see by dayly experience in those that are given to the drinking of these Liquors: to which I answer it is true: but then I must distinguish of *Aqua vite*, and spirit of Wine, for there is a common *Aqua vite*, and spirit of Wine, of which also they make Aniseed water by putting a few Aniseeds thereunto, and other such like waters, as Clove, Angelica, Lemmon, &c. With which this Nation is most abominably cheated, and their health impaired. But these are not rectified throughly, but three parts of four of them are an insipid Narcotick flegm, containing in it the feces I spake of, all which I can in a day separate from the true pure spirit, which spirit rather prevents then causes such distempers: And the truth is, all the goodnesse of the Wine is from this pure spirit.

The famous Arcanum, or restorative Medicament of Paracelsus, called his Homunculus.

First we must understand that there are three acceptions of the word *Homunculus* in *Paracelsus*, which are these.

1 *Homunculus* is a superstitious imagemade in the place or name of any one, that it may contain an Astrall and invisible man; wherefore it was made for a superstitious use.

2 *Homunculus* is taken for an artificiall man, made of *Sperma humanum Masculinum*, digested into the shape of a man, and then nourished and encreased with the essence of mans bloud; and this is not repugnant to the possibility of Nature and Art. But is one of the greatest wonders of God which he ever did suffer mortall man to know. I shall not here set down the full processe because I think it unfit to be done, at least to be divulged: besides, neither this nor the former is for my present purpose.

3 *Homunculus* is taken for a most excellent *Arcanum* or Medicament extracted by the spagyricall Art, from the chiefeest stasse
of

of the naturall life in man, and according to this acception I shall here speak of it: But before I shew you the proceſſe I shall give you an account why this Medicament is called *Homunculus*, and it is this.

No wise man will deny that the staffe of life is the nutriment thereof, and that the chiefest nutriment is Bread and Wine, being ordained by God and Nature above all other things for the sustentation thereof. Besides *Paracelsus* preferred this nutriment for the generation of the blood and spirits, and the forming thence the Sperm of this *Homunculus*. Now by a futable allusion the nutriment is taken for the life of man, and especially because it is transmuted into life: and again the life is taken for the man, for unlesse a man be alive he is not a man, but the carcasſe only of a man, and the basest part thereof, which cannot perfectly be taken for the whole man, as the noblest part may. In as much therefore as the nutriment, or aliment of life may be called the life of man, and the life of man be called man; this nutriment extracted out of Bread and Wine, and being by digestion exalted into the highest purity of a nutritive substance, and consequently becoming the life of man, being so potentially, may Metaphorically be called *Homunculus*.

The proceſſe, which in part shall be set down allegorically is thus: Take the best Wheat and the best Wine, of each a like quantity, put them into a glasse, which you must hermetically close: then let them putrefie in horse dung three days, or until the Wheat begin to germinate, or to sprout forth, which then must be taken forth and bruised in a Mortar, and be pressed through a linnen cloth, and there will come forth a white juice like milk; you must cast away the feces: Let this juice be put into a glasse, which must not be above half full; stop it close and set it in horse dung as before, for the space of fifty days. If the heat be temperate, and not exceeding the naturall heat of a man, the matter will be turned into a spagyricall blood, and flesh, like an Embryo. This is the principal, and next matter, out of which is generated a twofold sperm, viz. of the father and mother, generating the *Homunculus*, without which there can be made no generation, whether humane, or animall.

From the blood, and flesh of this Embryo let the water be

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separated

Separated in *Balneo*, and the air in ashes, and both be kept by themselves. Then to the feces of the latter distillation let the water of the former distillation be added, both which must (the glasse being close stoppt) putrefie in *Balneo* the space of ten days, after this distill the water the second time, (which is then the vehiculum of the first) together with the fire, in ashes, then distill off this water in a gentle *Balneo*, and in the bottom remains the fire which must be distilled in ashes. Keep both these a part. And thus you have the four Elements separated from the Chaos of the Embryo.

The feculent earth is to be reverberated in a close vessel for the space of four dayes: In the interim distil off the fourth part of the first distillation in *Balneo*, and cast it away; the other three parts distill in ashes, and pour it upon the reverberated earth, and distill it in a strong fire; cohobate it four times, and so you shall have a very clear water, which you must keep by it self: Then pour the air on the same earth, and distil it in a strong fire, and there will come over a clear, splendid, odoriferous water, which must be kept apart: After this pour the fire upon the first water, and putrefie them together in *Balneo* the space of three dayes, then put them into a Retort and distil them in sand, and there will come over a water tasting of the fire: let this water be distilled in *Balneo*, and what distils off keep by it self, as also what remains in the bottome, which is the fire, keep by it self. This last distilled water pour again upon its earth, and let them be macerated together in *Balneo* for the space of three dayes, and then let all the water be distilled in sand, and let what will arise be separated in *Balneo*, and the residue remaining in the bottome be reserved with the former residue. Let the water be again poured upon the earth, be abstracted, and separated as before, untill nothing remain in the bottom, which is not separated in *Balneo*. This being done, let the water which was last separated be mixed with the residue of its fire, and be macerated in *Balneo* three or four dayes, and all be distilled in *Balneo*, that can ascend with that heat, and let what remains be distilled in ashes from the fire, and what shall be elevated is aerial; and what remains in the bottome is fiery. These two last Liquors are ascribed to the two first principles, the former to Mercury,

Mercury, and the latter to Sulphur, and are accounted by *Paracelsus*, not as Elements, but their vitall parts, being as it were the natural spirits and soul, which are in them by nature. Now both are to be rectified, and reflected into their center with a circular motion, that this Mercury may be prepared with its water being kept clear, and odoriferous in the upper place, but the Sulphur by it self. Now it remains that we look into the third principle: let the reverberated earth being ground upon a marble imbibe its owne water, which did above remain after the last separation of the Liquors made in *Balneo*, so that this be the fourth part of the weight of its earth, and be congealed by the heat of ashes into its earth, and let this be done so oft, the proportion being observed, untill the earth hath drunk up all its water. And lastly let this earth be sublimed into a white powder, as white as snow, the feces being cast away. This earth being sublimed and freed from its obscurity is the true Chaos of the Elements, for it contains those things occult, seeing it is the salt of nature, in which they lye hid, being as it were reflected in their center. This is the third principle of *Paracelsus*, and the salt, which is the matrix, in which the two former sperms, viz. of the man and woman, the parents of the *Homunculus*, viz. of Mercury and Sulphur, are to be put, and to be closed up together in a glazen womb sealed with *Hermes* seals for the true generation of the *Homunculus* produced from the spagyricall Embryo: and this is the *Homunculus* or great Arcanum, otherwise called the nutritive Medicament of *Paracelsus*.

This *Homunculus* or nutritive Medicament, is of such vertue that presently after it is taken into the body, it is turned into blood, and spirits. If then diseases prove mortall because they destroy the spirits, what mortal disease can withstand such a medicine, that doth so soon repair, and so strongly fortifie the spirits as this *Homunculus* being as the oyl to the flame, into which it is immediately turned, thereby renewing the same? By this Medicament therefore, as diseases are overcome, and expelled, so also youth is renewed, and gray hairs prevented.

An Artificiall way to make Flesh.

TAKE of the crums of the best wheaten bread assoon as it comes forth out of the Oven being very hot, as much as you please, put it into a glasse vessell, which you must presently hermetically close. Then set it in digestion in a temperate *Baino*, the space of two monthes, and it will be turned into a fibrous flesh.

If any Artist please to exalt it to a higher perfection according to the Rules of Art, he may find out, how great a nourisher, and restorative Wheat is, and what an excellent medicine it may make.

Note that there must be no other moisture put into the glass besides what is in the bread it self.

Paracelsus his way for the raising of a dead bird to life, and for the generating many Serpents of one, both which are performed by putrefaction.

A Bird is restored to life thus, *viz.* Take a Bird, put it alive into a gourd glasse, and seal it up hermetically, burn it to ashes in the third degree of fire, then putrefie it in horse dung into a mucilaginous flegm, and so by a continued digestion that flegm must be brought to a further maturity (being taken out, and put into an oval vessell of a just bignesse to hold it) by an exact digestion, and will so become a renewed bird: which saith *Paracelsus* is one of the greatest wonders in Nature, and shews the great vertue of putrefaction.

2 Cut a Serpent into small pieces, which put into a gourd glasse which you must Hermetically seal up, then putrefie them in horse dung, and the whole Serpent will become living again in the glasse, in the form either of worms or spawne of fishes; Now if these worms be in a sitting manner, brought out of putrefaction, and nourished; many hundred Serpents will be bred out of one Serpent, whereof every one will be as big as the first. And as it is said of the Serpent, so also many other living creatures may be raised, and restored again.

To make an artificiall Mallago Wine.

First take a wine barrell well hooped and dressed, with one end being open, to which a close cover must be well fitted, which must be to take off and put on at pleasure. Set it in a warm place Winter or Summer, and fill it full with clear and pure water, to each three gallons, put six pound of the best Mallago Raisins, which you must bruise in a stone Mortar, and then strow upon the water, upon each twenty gallons of which you must cast a handfull of Calx vive, then cover the vessell close with the cover, and cast clothes upon it to keep it warm, and let it stand four or five dayes to work as Wine or Beer doe when they be new : then see if the Raisins be risen up to the top of the Water; if so, then put them down again, and cover it again as before; let them thus stand three weeks or a month together, the Raisins being every fourth or fifth day put down in case they rise up. Then put a tap into the vessell three or four fingers above the bottome, and try if it be good, and taste like Wine; if not, let it stand a while longer, but if so, draw it off into another wine vessell, and to every twenty gallons that you have drawn off, put a pint of the best *Aqua vita*, two new laid Hen-eggs, and a quart of Alligant beaten well together, and let it stand in a cellar as other wine doth, till it be clear and fit to be drunk.

To make an artificiall Claret wine.

Take six gallons of water, two gallons of the best Cidar, put thereunto eight pound of the best Mallago Raisins bruised in a Mortar, let them stand close covered in a warm place the space of a fortnight, every two days stirring them well together, then presse out the Raisins and put the Liquor into the said vessell again: to which adde a quart of the juice of Rasp-berries, and a pint of the juice of Black cherries, cover this Liquor with Bread spread thick with strong Mustard, the Mustard side being downward, and so let it work by the fire side three or four days, then run it up, and let it stand a week, & then bottle it up. And it will taste

taste as quick as bottle-beer, and indeed become a very pleasant drink, and indeed farre better, and wholsomer then our common Claret.

An artificiall Malmsey.

Take two gallons of English honey, put it into eight gallons of the best Spring water, set these in a vessell over a gentle fire, when they have boyled gently an hour take them off, and when they be cold put them into a smal barrell or runlet, hanging in the vessell a bag of spices and set it in the cellar, and in half a year you may drink thereof.

To make an excellent aromaticall Hyppocras.

Take of Cinnamon two ounces, Ginger an ounce, Cloves and Nutmegs of each two drams, of white Pepper half a dram, of Cardamums two drams, of Musk Mallow seed, three ounces. Let all these be bruised, and put into a bag and hanged in six gallons of Wine. Note that you must put a weight in the bag to make it sink.

Some boyl these spices in Wine, which they then sweeten with sugar, and then let run through a Hyppocras bag, and afterwards bottle it up, and use when they please.

A single Hyppocras bag, or Manica Hippocratis.



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When you would have this or any other Liquor to be very clear, you may use the triple Hypocras bag, for what feces passeth the first will stay in the second, and what in the second will stay in the last.

Note that these bags must be made of white Cotton.

A triple Hypocras bag is only one hanging above another after this manner.



To make an excellent Hypocras Wine in an instant.

Take of Cinnamon two ounces, Nutmegs, Ginger, of each half an ounce, Cloves two drams, bruse these small, then mix them with as much Spirit of Wine as will make them into a paste, let them stand close covered in a glass the space of six days in a cold place, then presse out the Liquor, and keep it in a glass.

A few drops of this Liquor put into any Wine giveth it a gallant relish, and odour, and maketh it as good as any Hypocras whatsoever, and that in an instant.

Note that if the Wine be of it selfe harsh, it will not be amisse to sweeten it with Sugar, for thereby it is made far more gratefull.

This also being put into Beer will make it very pleasant, and aromaticall.

Another way to make Hypocras, or to make any Wine to tast of any vegetable in an instant.

Take what Wine you please, and according as you would have it tast of this or that spice, or any other vegetable, of one or more together, you may drop a few drops of the distilled oil of the said spices, or vegetables into the Wine, and brew them well together, and you may make in an instant all sorts of Hypocras or other Wines: as for example, if you would have Wormwood Wine, two or three drops of oil of Wormwood put into good Rhenish-wine, being well brewed together, will make a Wormwood Wine exceeding any that you shall meet withall in the Rhenish-wine houses.

To make a good Raspberry-wine.

Take a gallon of Sack, in which let two gallons of Raspberries stand sleeping the space of twenty four houres; then strain them, and put to the Liquor three pound of Raisins of the sun stoned; let them stand together foure or five days, being sometimes stirred together: Then pour off the clearest, and put it up in bottles, and set it in a cold place, If it be not sweet enough you may adde some Sugar to it.

Two other wayes to make it all the year at an instant.

Take of the juice of Raspberries, put it into a bottle, which you must stop close, and set in a cellar, and it will become clear, and keep all the year, and become very fragrant.

A few sponfulls of this put into a pint of Wine sweetned well with Sugar gives it an excellent and full tast of the Raspes.

If you put two or three ounces of the Syrup of Raspes to a pint of Wine it will doe as well, but then you need use no other Sugar, for that will sweeten it sufficiently.

To make Mead or Mesheglin that it shall tast stale and quick within a fortnight and be fit to drinke.

To every three gallons of water, put one gallon of the purest Honey, put what hearbs and spices you please, boyl it, and skim it well, now and then putting in some water. When it is sufficiently boyled take it off, and when it is almost cold, put it into a wooden vessell, and set it by the fire side, cover it over with Bread spread thick with the strongest Mustard, the Mustard side being downwards, and so let it stand three dayes, and it will worke, only put a cloth over it: Then tunne it up, and after a week draw it forth into bottles, and set it into a cellar, and after a week more you may drink of it, for it will taste as quick as bottle beer that is a fortnight old, and indeed as stale as other Mead will in half a year.

To make a Spirit of Amber-gryse that a few drops thereof shall perfume a pint of Wine most richly.

Take of Amber-gryse 2. drams, of Musk a dram, cut them small, and put them into a pint of the best rectified Spirit of Wine, close up the glasse Hermetically, and digest them in a very gentle heat till you perceive they are dissolved. Then you may make use of it.

Two or three drops or more if you please of this Spirit put into a pint of Wine, gives it a rich odour.

Or if you put 2. or 3. drops round the brimmes of the glasse it will do as well.

Half a spoonfull of it taken either of it self, or mixed with some speciall Liquor, is a most rich Cordiall.

An excellent sweet Water.

Take a quart of Orenge-flower water, as much Rose-water, adde thereto of Musk-mallow seeds grossely bruised four ounces, of B njamin two ounces, of Storax an ounce, of Labdanum six drams, of Lavender flowers two pugills, of sweet Marjoram

as much, of *Calamus Aromaticus* a dram, distill all these in a Glasse Still in *Balneo*, the vessels being very well closed that no vapour breath forth.

Note that you may make a sweet water in an instant by putting a few drops of some distilled oils together into some Rose-water, and brewing them well together.

To purifie and give an excellent smell, and tast unto oil Olive that they that loath it may delight to eat it.

Take of a good sort of oil Olive though not of the best, put the same into a vessell of earth or copper, that hath a little hole in the bottome thereof, which yon may stop with wax or a cork to open at your pleasure. In this vessell for every quart of oil adde four quarts of fair water, and with a wooden spatle or spoon, beat them well together for a quarter of an houres space, and when you have so done, open the hole in the bottome, and let out the water, for the oil doth naturally fleet above, as being the lighter body: and as soon as the water is passed away, stop the hole, and put in other cold water, and begin a new agitation as before, and worke in the like manner divers times as you did at the first, till in the end the oil be well cleansed and clarified. If the last time you work it with Rose-water it will be so much the better. then hang in the midst of the oil a course bag full of Numeags sliced, and Cloves bruised, and the rinds of Orengees and Lemons cut small, and set the vessell in *Balneo* for two or three houes, and I suppose he that loaths oil will be easily by this meanes drawn to a liking of it.

Another way.

Set oil Olive in the sunne in summer-time untill there settle good store of foule, and grosse Lees, from the which by declination poure out the clear oil, and keep it till the next winter, and after the same hath been congealed with some frosty weather, the oil will be most sweet, and delectable to the tast.

After this manner you may clarify all thick oils, and all kinds of grease, but then you must use warme water instead of cold.

To purifie Butter that it shall keep fresh and sweet a long time, and be most wonderful sweet in tast,

Dissolve butter in a cleane glazed or silver vessell and in a pan or kettle of water with a slow, and gentle fire, then pour the same so dissolved into a bason that hath some faire water therein, and when it is cold, take away the curds, and the whay that remain in the bottome. And if you will be at the charge thereof, you may the second time for it must be twice dissolved) dissolve the Butter in Rose-water, working them well together: the Butter thus clarified will be as sweet in tast as the marrow of any beast, by reason of the great impurity that is removed by this manner of handling, the fift part thereof being drosse, which makes the Butter many times offensive to the stomach.

To make Butter tast of any vegetable without altering the colour thereof.

When the Butter is taken out of the cherne and well worked from the seru us part thereof, mix with the said Butter as much of the oil of that vegetable which you like best, till the same be strong enough in tast to your liking, then temper them well together.

If you do in the month of May mix some oil of Sage with your Butter it may excuse you from eating Sage with your butter.

If you mix the oil with the aforesaid clarified Butter, it will be farre better, and serve for a most dainty dish, and indeed a great rarity.

To make Cheese tast strong of any vegetable without discolouring of it.

You may mix the distilled oil of what vegetable you would have the Cheese tast of, with the curd, before the whay be pressed out; but be sure you mix them very well that all places may tast alike of it; you may make it tast stronger, or weaker of it as you please by putting in more or lesse of the oil.

To purifie and refine Sugar.

Make a strong Lixivium of Calx vive, whereing dissolve as much course Sugar as the Livivium will beare, then put in the white of Egges (of 2 to every part of the Liquor) being beaten into an oil, stir them well together, and let them boyl a little, and there will arise a scum which must be taken off as long as any will arise, then poure all the Liquor through a great Wollen cloth bag, and so the feces will remain behinde in the bag, then boyl the Liquor again so long till some drops of it being put upon a cold plate will, when they be cold, be congealed as hard as salt. Then pour out the Liquor into pots, or moulds made for that purpose, having a hole in the narrower end thereof, which must be stopped for one night after, and after that night be opened, and there will a moist substance drop forth which is called Molosses, or Treakle, then with potters clay cover the ends of the pot, & as that clay sinketh down by reason of the sinking of the Sugar, fill them up with more clay, repeating the doing thereof till the Sugar shrink no more. Then take it out till it be hard, and dried, then bind it up in papers.

To make a vegetable grow and become more glorious then any of its species.

Reduce any vegetable into its three first principles, and then joyne them together again being well purified, and put the same into a rich earth, and you shall have it produce a vegetable far more glorious then any of its species.

Note how to make such an essence, look into the first book, and there you shall see the processe thereof.

To make a Plant grow in two or three houres.

Take the ashes of Mosse, moisten them with the juice of an old dunghill being first pressed forth, and streined, then dry them a little, and moisten them as before, do this four or five times, put this mixture being neither very dry, nor very moist, into some earthen, or metalline vessell; and in it set the seeds of Lettice, Purslain

Purslain or Parsly (because they will grow sooner then other Plants) being first in pregnated with the essence of a vegetable of its own species, (the processe whereof you shall find Book 1. page 32, 53.) till they begin to sprout forth, then I say, put them in the said earth with that end upwards which sprouts forth: Then put the vessell into a gentle hear, and when it begins to dry, moisten it with some of the said joyce of dung.

Thou maist by this meanes have a Sallet grow whilest supper is making ready.

To make the Idea of any Plant appear in a glasse, as if the very plant it selfe were there.

The processe of this thou maist see, pag. 32. and therefore I need not here again repeat it, only remember that if you put the flame of a candle to the bottome of the glasse where the essence is, by which it may be made hot, you wil see that thin substance which is like impalpable ashes or salt send forth from the bottome of the glasse the manifest forme of a vegetable, vegetating and growing by little, and little, and putting on so fully the forme of stalkes, leaves, and flowers in such perfect, and naturall wise in apparent shew, that any one would believe verily the same to be naturally corporall, when as in truth it is the spirituall Idea, endued with a spirituall essence; which serveth for no other purpose, but to be matched with its fitting earth, that so it may take unto it selfe a more solid body. This shadowed figure as soon as the vessell is taken from the fire, returnes to its ashes again and vanisheth away, becoming a Chaos, and confused matter.

To make Firre-trees appear in Turpentine.

Take as much Turpentine as you please, put it into a Retort, distill it by degrees, when all is distilled off, keep the Retort still in a reasonable heat, that what humidity is still remaining may be evaporated, and it become dry: Then take this off from the fire and hold your hand to the bottome of the Retort, and the Turpentine that is dried (which is called Colophonia) will crack

crack asunder in severall places, and in those crackes or chaps you shall see the perfect effigies of Firre-trees which will there continue many moneths.

To make Harts-horn seemingly to grow in a glasse.

Take Harts-horn broken into small pieces, and put them into a glasse Retort to be distilled, and you shall see the glasse to be seemingly full of horns, which will continue there so long till the volatile salt come over.

To make golden mountains as it were appeare in a glasse.

Take of Adders egges half a pound, put them into a glasse Retort, distill them by degrees, when all is dry, you shall see the feces at the bottome turgid, and puffed up, and seem to be as it were golden mountains, being very glorious to behold.

To make the representation of the whole World in a Glasse.

Take of the purest salt Nitre as much as you please, of Tin half so much, mix them together, and calcine them Hermetically, then put them into a Retort, to which annex a glasse receiver, and lue them well together, let there be leaves of gold put into the bottome thereof, then put fire to the Retort, untill vapours arise that will cleave to the gold: augment the fire till no more fumes ascend, then take away the Receiver, and cloie it Hermetically, and make a lamp fire under it, and you will see presented in it the Sun, Moone, Stars, Fountains, Flow-ers, Trees, fruits, and indeed even all things, which is a glorious sight to behold.

To make four Elements appear in a glasse.

Take of the subtle powder of Jet an ounce and half, of the oil of Tartar made *per Deliquium* (in which there is not one drop of water besides what the Tartar it self contracted) two ounces, which you must colour with a light green with Verdegrease,

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grease, of the purest Spirit of Wine tinged with a light blew with Indico, 2. ounces of the best rectified Spirit of Turpentine coloured with a light red with Madder 2. ounces. Put all these into a glasse, and shake them together, and you shall see the Jes which is heavy and black fall to the bottome and represent the earth; next, the oil of Tartar made green representing the element of water, falls: upon that swims the blew spirit of Wine which will not mix with the oil of Tartar, and represents the element of air: uppermost will swim the subile red oil of Turpentine which represents the element of fire.

It is strange to see how after shaking all these together they will be distinctly separated the one from the other. If it be well done, as it is easie enough to do, it is a most glorious sight.

Distilled oil of Turpentine, Indigo, Madder, Spirit of Wine, Oil of Tartar.

To make a perpetuall motion in a glasse.

Take seven ounces of Quicksilver, as much Tin, grinde them well together with fourteen ounces of Sublimate dissolved in a cellar upon a Marble the space of foure dayes, and it will become like oil Olive, which distill in sand, and there will sublime a dry substance, then put the water which distills off back upon the earth, in the bottome of the Still, and dissolve what you can, filter it, and distill it again, and this do foure or five times, and then that earth will be so subtile, that being put into a viall the subile atome thereof will move up and down for ever.

Note that the viall or glasse must be close stopp'd, and kept in a dry place.

To make a Luminous Water that shall give light by night.

Take the tails of Glo-wormes, put them into a glasse Still, and distill them in Balnes, pour the said water upon more fresh tails of Glo-wormes, do this foure or five times, and thou shalt have a most Luminous Water, by which thou shalt see to read in the dark night.

Some say this Water may be made of the Skins of Herring, and for ought I know it may be probable enough: for I have heard that a shoole of Herrings coming by a ship in the night have given a great light to all the ship.

It were worth the while to know the true reason why Glow-wormes, and Herring and some other such like things should be luminous in the night.

To make a vapour in a chamber that be that enters into it with a candle shall thinke the room to be on fire.

Dissolve Camphire in rectified *Aqua vite*, and evaporate them in a very close chamber where no air can get in, and he that first enters the chamber with a lighted candle will be much astonished, for the chamber will seem to be full of fire, very subtle, but it will be of little continuance.

You must note that it is the combustible vapour, with which the chamber is filled, that takes flame from the candle.

Divers such like experiments as this may be done, by putting such a combustible vapour into a box, or cupboard or such like, which will as soon as any one shall open them having a candle in his hand, take fire, and burne.

To make a powder that by spitting upon shall be inflamed.

Take a Load-stone, powder it, and put it into a strong calcining pot, cover it all over with a powder made of Calx vive, and Colophonia, of each a like quantity, put also some of this powder under it: when the pot is full cover it, and lute the closures with potters earth, put them into a furnace, and there let them boyl, then take them out and put them into another pot, and set them in the furnace again, and this doe till they become a very white and dry Calx. Take of this Calx one part, of salt Nitre being very well purified foure partes, and as much Camphire, Sulphur vivum, the oil of Turpentine, and Tartar, grind all these to a subtle powder and searse them, and put them into a glasse vessell, then put as much Spirit of wine well rectified, as will cover them two fingers breadth, then close them up and set the vessell in horfeding three moneths, and in that time they will all become an uniforme paste: evaporate all the humidity, untill the whole masse become a very dry stone: then take it out and powder it, and keep it very dry.

If you take a little of this powder and spit upon it, or pour some water upon it, it will take fire presently, so that thou maist light a match, or any such thing by it.

*To fortifie a Load-stone that it shall be able to draw a nail
out of a piece of wood.*

Take a Load-stone, and heat it very hot in coales, but so that it be not fired, then presently quench it in the Oil of *Crim Martia* made of the best Steele, that it may imbibe as much as it can.

Thou shalt by this means make the Load-stone so very strong and powerfull, that thou maist pull out nailles out of a piece of wood with it, and do such wonderfull things with it that the common Load-stone can never do.

Now the reason of this (as *Paracelsus* saith) is because the Spirit of Iron is the life of the Load-stone, and this may be extracted from, or increased in the Load-stone.

To make Quick-silver Malleable in seven hours.

Take of the best lead, and melt it, and poure it into a hole, and when it is almost congealed make a hole in it, and presently fill up the hole with quick-silver. and it will presently be congelated into a friable substance, then beat it into a powder, and put it again into a hole of fresh melted lead as before, do this 3, or 4 times, then boyl it being all in a piece in Linsed oil the space of six hours; then take it out and it will become malleable.

Note that after this, it may by being melted over the fire be reduced into quick-silver again.

A thin plate of the said Mercury laid upon an inveterate Ulcer takes away the malignity of it in a great measure, and renders it more curable then before.

A plate of the said Mercury laid upon tumours would be a great deal better repercussive then plates of lead, which Chirurgeons use in such cases.

The powder of the friable substance of Mercury before it be boyled in the oil is very good to be strewed upon old ulcers, for it doth much correct the virulency of them.

To reduce Glasse into its first principles, viz. sand and salt.

Take bits or powder of Glasse as much as you please, as much of the Salt which Glassemen use in the making of Glasse melt these together in a strong fire: Then dissolve all the melted masse in warme water, then pour off the water and you shall see no Glasse, but only sand in the bottome, which sand was that which was in the glasse before.

This confutes the vulgar opinion, viz. that the fusion of Glasse is the last fusion, and beyond all arduation.

To write or engrave upon an egge, or peble, with wax or grease.

Make what letters or figures you please with wax, or grease, upon an egge or peble, put them into the strongest Spirit of Vinegar, and there let them lye 3. or 4. dayes, and you shall see every place about the letters or figures eaten or consumed away with the said Spirit, but the place where the wax or grease was, not at all touched: the reason whereof is because that the Spirit would not operate upon the said oleaginous matter.

To make artificiall Pearles, as glorious as any naturall.

Dissolve mother of Pearle in Spirit of vinegar, then precipitate it with Oil of Sulphur per Campanam, (and not with Oil of Tartar, for that takes away the splendour of it) which added to it, when it is thus precipitated, dry it, and mix it with whites of egges, and of this masse you may make Pearles of what bignesse or fashion you please: before they be dried you may make holes through them, and when they be dried they will not at all, or very hardly be discerned from true, and naturall Pearles.

To make a Universall perfume.

Dissolve Anacomy, or Sulphur in the Liquor or Oil of flints or pebles, or Crystalls, or sand, coagulate the solution

into a red masse, pour thereon the Spirit of urine, and digest them till the Spirit be tinged, then poure it off, and pour more on, till all the tincture be extracted, put all the tinctures together, and evaporate the Spirit of urine in *Balneo*, and there will remain a blond-red Liquor at the bottome, upon which pour Spirit of wine, & you shall extract a purer tincture, which smelleth like garlick, digest it three or four weeks, and it will smell like balme, digest it longer, and it will smell like Muske or Amber-gryse.

Besides the smell that it hath, it is an excellent Sudorifick, and cures all diseases that require sweat, as the plague, putrid fevers, lues venerea, and such like.

The Oil or Liquor of sand, flints, pebles, or Crystals, for the afor:said preparation is thus made.

Take of the best salt of Tartar being very well, by two or three dissolutions, and coagulations, purified, and powdered in a hot mortar, one part, of flints, pebles, or crystals being powdered, or small sand well washed, the fourth part, mingle them well together, put as much of this composition as will fill an egg-shell into a Crucible set in the earthen Furnace, (expressed page 83.) and made red hot, and presently there will come over a thick, and white spirit, this doe till you have enough, then take out of the Crucible whilest it is glowing hot, & that which is in it is like transparent glasse, which keep from the aire.

The Spirit may be rectified by sand in a glasse Retort.

This Spirit is of excellent use in the gout, stone, ptisick, and indeed in all obstructions, provoketh sweat, and urine, and cleanseth the stomack, and by consequence effectuall in most diseases.

It being applyed externally cleareth the skin, and makes it look very faire.

Take that which remains at the bottome in the crucible, and beat it to powder, and lay it in a moist place, and so it dissolveth into a thick fat Oil: and this is that which is called the Oil of sand, of flints, pebles, or crystals.

This Oil is of wonderfull use in medicines, as also in the preparation of all sorts of Mineralls.

This oil being taken inwardly in some appropriated Liquor dissolves tartarous coagulations in the body, and so opens all obstructions.

It precipitates metals, and makes the calx thereof more weighty, then oil of Tartar doth.

It is of a golden nature : it extracts colours from all metals, is fixed in all fires, maketh fine Crystals, and Borax, and maturifieth imperfect metals into gold.

If you put it into water there will precipitate a most fine white earth, of wch you may make as clear vessels as are China-dishes.

Note that all sand, flints, and pebles, even the whitest, have in them a golden sulphur, or tincture, and if a prepared lead be for a time digested in this oil it will seem as it were gilded, because of the gold that will hang upon it, which may be washed away in water. Gold also is found in sand and flints, &c. and if you put Gold into this oil it will become more ponderous thereby.

To make Steele grow in a glass like a tree.

Dissolve Steele in a rectified Spirit of salt, so shall you have a green and sweet solution, which smells like brimstone, filter it, and abstract all the moisture in sand with a gentle heat, and there will distil over a Liquor as sweet as rain-water (for Steele by reason of its dryness detaines the corrosiveness of the Spirit of salt, which remaineth in the bottome like a bloud red masse, which is as hot on the tongue as fire, dissolve this red masse in oil of flints, or of sand, and you shall see it grow up in two or three houres, like a tree with a stem, and branches; prove this tree at the test, and it yeeldeth good gold, which this tree hath drawn from the aforesaid oil of sand, or flints, which hath a golden sulphur in it.

To melt any metall in ones hand without burning of the hand.

Take a little calcining pot in your hand, make in it a lane or course of the powder of any metall, then upon it lay a lane of Sulphur, Salt-peter and Saw-dust, of each a like quantity, mixed together, put a coal of fire to it, and forthwith the metall will be melted into a masse.

An observation upon the beames of the Sun and heat of the fire, how they add weight to Minerall, and Metalline bodies.

1. Take any Minerall Liquor and set it in an open vessell in the sun for a good space, and it will be augmented in quantity, and weight. But some will say that this proceedeth from the air: to the which I answer and demand, whether the air had not this impregnation from the sun, and what the air hath in it self that proceedeth not from the sun and stars.

2. Put this liquor in a cold cellar, or in a moist air, and you shall find that it increaseth not in weight, as it doth in the sun, or in the fire (which hath in this respect some analogie with the sun) I do not say but haply it might attract some little moisture which is soon exhaled by any small heat.

3. Dissolve any sulphurous, and imperfect metall, as Iron, Copper, or Zinke, in *Aqua fortis*, or any other acid spirit, then abstract the Spirit from it, make it glowing hot, yet not too hot, that the Spirit may only vapour away, then weigh this metalline Calx, and set it in a crucible over the fire, but melt it not, only let it darkly glow, let it stand so 3, or 4, weeks, then take it off, and weigh it again, and you shall find it heavier then before.

4. Set any sulphurous metall, as Iron, or Copper, with sixteen or eighteen parts of Lead on a test made with ashes of wood, or bones in a probatory furnace: first weigh the test, copper and lead before you put them into the furnace, let the iron or copper fly away with the lead, yet not with too strong a heat, then take the test out, and weigh it, and you shall finde it (though the metals are gone) when it is cold to be heavier then it was when it was put into the furnace with the metals. The question is now whence this heaviness of all the aforesaid Minerals and metals proceeded, if that the heat of the sun, and fire through the help of the Minerals and metals be not fixed into a palpable Minerall, and Metalline body?

5. Set a test with lead, or copper in the sun, and with a concave glasse unite the beames of the sun, and let them fall on the center of the metall, hold the concave glasse in your hand, and let your test never be cold, and this will be as well done in the sun.

fun, as in the fire. But this concave must be two foot in Diameter, and not too hollow or deep, but about the eighteenth or twentieth part of the circle, that it may the better cast its beams forth, and it must be very well polished.

6. Calcine Antimony with a burning glasse, and you shall see it smoke, and fume, and be made dryer then before, yet weigh it and it will be heavier then before. I shall take in, for the confirmation of all this, a relation of Sir Kenelm Digby concerning the precipitating of the sun beams. I remember (saith he) a rare experiment that a Noble man of much sincerity, and a singular friend of mine, told me he had seen, wch. was, that by means of glasses made in a very particular manner, and artificially placed one by another, he had seen the sun beames gathered together, and precipitated down into a brownish, or purplish red powder. There (saith he) could be no fallacy in this operation. For nothing whatsoever, was in the glasse, when they were placed, and disposed for this intent, and it must be in the hot time of the yeare, else the effect would not follow. And of this magistry he could gather some dayes neer 2. ounces in a day, and it was of a strong volatile vertue, and would presse it spirituall quality into gold it selfe (the heaviest and most fixed body we converse withall) in a very short time.

I leave it now to the reader to judge whether the beames of the sun, and heat of the fire adde weight to Minerals, and Metals.

To extract a white Milkie substance from the raies of the Moone.

Take a concave glasse and hold it against the Moon when she is at the full in a cleare evening, and let the raies thereof being united fall upon a sponge, and the sponge will be full of a cold Milkie substance, which you may presse out with your hand, and gather more. De-La-Brosse is of opinion that this substance is of the substance of the Moon: but I cannot assent to him in that, only this I say, if this experiment were well prosecuted, it might produce for ought I know, such a discovery which might be the key to no small secrets.

To condense the aire in the heat of summer and in the heat of the day, into water.

Fill an earthen vessell unglazed, made pointed downward, and fill it with snow-water (which must be kept all the year) in which is dissolved as much Nitre as the water would dissolve: Let the vessell be close stopp'd. Hold this vessell against the sun and the air will be so condensed by the coldnesse of the vessell that it will drop down by the sides thereof.

How two sorts of volatile salts will be fixed by joyning them together.

Take a strong Lixivium made of unslaked lime, and evaporate it, and whereas you would expect to find a salt at the bottome there is none, for all the salt in the Lixivium is vapored away, and the more the Liquor is evaporated the weaker the Lixivium becomes, which is contrary to other Lixiviums: Also if you take Spirit of vinegar, and evaporate it, you shall finde no salt at the bottome. Now if you take the clear Lixivium of Lime, and Spirit of vinegar, of each a like quantity, and mix them together, and evaporate the humidity thereof, you shall find a good quantity of salt at the bottome, which tastes partly hot, and partly acid.

This salt being set in a cold cellar on a marble stone, and dissolved into an oil, is as good as any *Lac virginis* to clear, and smoothe the face, and dry up any hot pustles in the skin, as also against the Itch, and old ulcers to dry them up.

To make an unguent that a few graines thereof being applied outwardly will cause vomiting or loosenesse as you please.

Take *Lapis infernalis*, mix therewith of distilled oil of Tobacco as much as will make an oinment: Keep it in a dry place.

If you would provoke vomiting, anoint the pit of the stomach with five or six graines thereof, and the party will presently vomit, and as much as with taking of a vomit.

If you would provoke to loosenesse anoint about the navell therewith, and the patient will presently fall into a loosenesse.

Note that you must give the patient some warme suppings all the time this medicine is working.

Note also, and that especially, that you let not the ointment lye so long as to cauterize the part to which it is applyed.

To make a medicine that halfe a graine thereof being taken every morning will keep the body soluble.

Take of the distilled oil of Tobacco, of which let the essentiall salt of Tobacco imbibe as much as it can. Then with this composition make some Lozenges by adding such things as are fitting for such a forme of medicine: Note that you put but such a quantity of this oily salt as halfe a grain only may be in one Lozenge.

One of these Lozenges being taken every morning, or every other morning, keepeth the body soluble, and is good for them as are apt to be very costive in their bodies.

Note that you may put some aromaticall ingredient into the Lozenges that may qualifie the offensive odour of the oil, if there shall be any.

To make a Cordiall, stomachicall, and purgative tincture.

Make a tincture of *Hierapicra* with Spirit of wine well rectified, and aromatized with Cinnamon or Cloves.

Two or three spoonfulls of this tincture being taken in a morning twice in a week wonderfully helps those that have weak and foul stomacks, it openeth obstructions, and purgeth viscosities of the stomach and bowells, cureth all inveterate head-ach killeth wormes, and indeed leaveth no impurities in the body, and is very cordiall: for it exceedingly helps them that are troubled with faintings. There is nothing offensive in this medicine but the bitterneffe thereof, which the other extraordinary vertues will more then ballance.

Another.

Dissolve Scammony in Spirit of Wine, evaporate the one moiety, then precipitate it by putting Rose-water to it : and it will become most white, for the black and fetid matter will lye on the top of the precipitated matter which you must wash away with Rose-water. Then take that white gum being very well washed, and dry it (if you please you may powder it and so use it, for indeed it hath neither smell nor taste, and purgeth without any offence, and may be given to children or to any that distast physick, in their milk or broth without any discerning of it, and indeed it doth purge without any manner of gripings. I was wont to make it up into pills with oil of Cinamon or Cloves which gave it a gallant smell, and of which I gave a scruple which wrought moderately and without any manner of gripings) then dissolve it again in Spirit of Wine being aromatized with what spices you please, and this keep.

This tincture is so pleasant, so gentle, so noble a purgative that there is scarce the like in the world, for it purgeth without any offence, is taken without any nauseating, and purgeth all manner of humours, especially choler, and melancholy, and is very Cordiall.

It may be given to those that abhor any medicine, as to children or those that are of a nauseous stomach.

The dose is from half a spoonfull to two or three.

Note it must be taken of it self, for if it be put into any other Liquor, the Scammony will precipitate and fall to the bottome.

After this manner you may prepare Jollap by extracting the gum therefore, and then dissolving it in Spirit of wine.

By this meanes Jollap would not be so offensive to the stomach, as usually it is, for it is the gum that is purgative, and the earthlineffe that is so nauseous.

Jollap being thus prepared is a most excellent medicine against all hydropick diseases, for it purgeth water away without any nauseousnesse or griping at all.

To reduce distilled Turpentine into its body againe.

Take the oil of Turpentine, and the Colophonias thereof (which is that substance which remains in the bottome after distillation) which you must beat to powder. Mix these together and digest them, and you shall have a Turpentine of the same consistency as before, but of a fiery subtile nature.

Pills made of this Turpentine, are of excellent use in obstructions of the breast, kidneyes and the like.

*To make the distilled Oil out of any heerb, seed or flower in
an instant without any
furnace.*

You must have a long pipe made of tin, which must have a bowle in the middle with a hole in it as big as you can put your finger into it: by which you must put your matter that you would have the Oil of. Set this matter on fire with a candle or coal of fire, then put one end of the pipe into a basen of fair water, and blow at the other end, and the smoak will come into the water, and there will an oil swim upon the water: which you may separate with a tunnell.

To make water, and the tincture of any vegetable at the same time, which is an excellent way to draw out the vertue thereof.

This must be performed by these following vessels.



- A, Signifies the Furnace it self.
- B, The Resort which stands in water or sand, wherein the matter to be distilled is put, instead whereof, if you please you may put a gourd glasse with a head to it.
- C, The pipe.
- D, Another vessell where is more fresh matter. out of which the tincture is to be drawne, and which stands upon ashes with a fire under it.
- E, The furnace with a pan of ashes.
- F, The receiver.
- G, The hole of the furnace to put in coals, to heat the second matter.

A way to separate fresh water from salt without a furnace or much trouble.

Take a Caldron with a great and high cover having a beake or nose, set it upon a trefoot, and under it put fire: let this be filled with salt water, and there will presently di-

still off a good quantity of fresh water into a receiver, which must be joyned to the nose of the aforesaid cover.

This is of good use for Sea-men that want fresh water, for by this meanes they may diffill a good quantity in 24. houres, especially if they have any considerable number of the aforesaid vessels, a figure whereof is this which followes.



A way to purge and purifie troubled and muddie waters.

Fill a great pot with pudled water, put a soft and gentle fire under it, lay some sticks across on the pot brims, and upon the sticks lay clean wool or a sponge well washed: Now the wool drinks up the vapours that ascend, which then you must wring out, and lay on the wool again, and this you may doe till you have as much clean water as you desire. The manner of this diffillation is described thus.

- A, Signifies the pot.
B, The fire.
C, The sticks.
D, The wool.

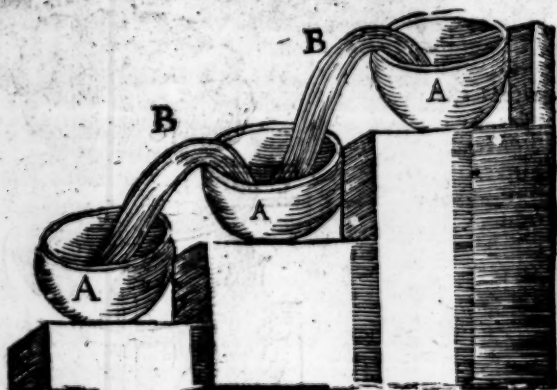


This is of use for them that can come at no other waters but what are troubled, as it falls out many times in some places.

Another way to purifie any thicke, muddie or feculens Liquor.

This is performed by shreds of any white woollen cloth, in vessels as you see hereafter expressed.

A, Sig



A, Signifies the vessels.

B, The shreds.

Note that the shreds must be first wet in fair water, and the feculent matter be put into the uppermost vessell.

Note also whereas here be two receivers, that in many cases one may be sufficient.

This way serves for the purifying of decoctions, juices, or dissolutions of salts from their feculency, for that which is distilled by the shreds is as clear as Cry stall, when what remains is very feculent.

*To keep fire in a glasse, that whilst the glasse
is shut will not burne, but assoone as
it is opened will be inflamed.*

First extract the burning spirit of the salt of tin in a glasse Retort well coated; when the Retort is cold, take it out and break it, and assoone as the matter in it, which remains in the bottome thereof after distillation, comes into the air, it will presently be inflamed. Put this matter into a glasse viall, and keep it close stoppt.

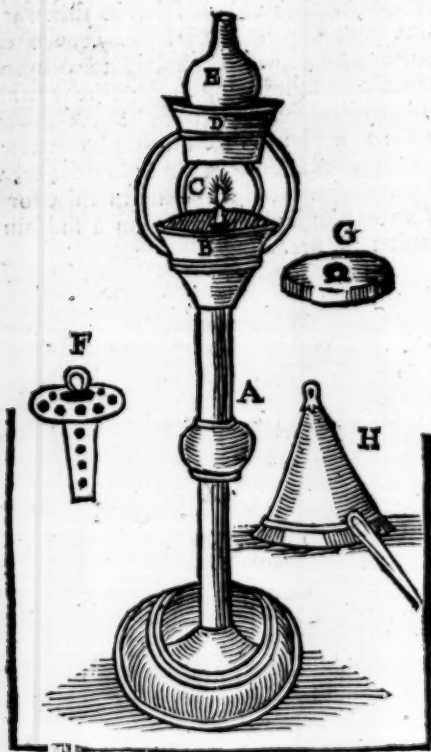
This

This fire will keep many thousand yeares and not burne unlesse the glasse be opened: but at what time soever that is opened it will burne.

It is conceived that such a kind of fire as this was found in vaults when they were opened, which many conceived to be a perpetuall burning Lamp, when as indeed it was inflamed at the opening the vault, and the letting in air thereby which before it lacked, and therefore could not burn. For it is to be conceived that there is no fire burnes longer then its matter endures, and there is no combustible matter can endure for ever.

There may be many uses of such a fire as this, for any man may carry it about him, and let it burn on a suddain when he hath any occasion for fire.

A Lamp Furnace is made thus.



- A, Signifies the Candlestick, which must be hollow, and full of water.
 B, The top of the candlestick which must be wide to containe good store of water for to fill up the Candlestick as the candle riseth up.
 C, The candle, which must be as long as the Candlestick.
 D, The vessell that contains either water, sand, or ashes for any vessell to be.

be set into; also to containe any matter it selfe that is to be distilled, or digested.

E, A glasse vessell standing in digestion.

F, A narrow mouthed stopple to be put into the candlestick to keep the candle upright, and that must be made of tin, with holes in it.

G, The cover for the vessell D, which is to be put upon it when any thing is decocted, or kept warme in it.

H, A Still head to put upon the vessell D, when you would distill any thing in it.

Note that if you make all these vessells large you may do many considerable things without much labour, or trouble.

In the vessell D, if it be large, you may stew meat, which if you put in at night and cover it close, you may have it ready for your breakfast in the morning, and so according to the time you put it in you may have it for dinner or supper. Also you may keep any thing warme in the night, and at all times, and divers such uses as these it may be used for.

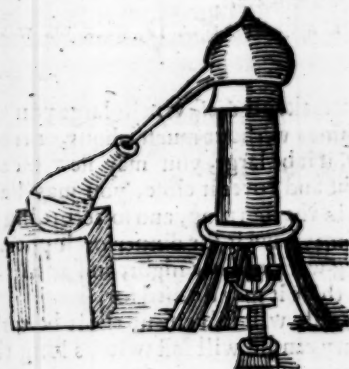
Note that the candle will still rise up till it be quite burned out, and an ordinary candle will last twice as long this way as it will out of the water.

If you would have one candle last a long time as twelve or twenty hours, you must either make your candlestick very long that it may containe a long candle, or make your candle big and the wick small, or make your candle of such matter as will not presently be consumed.

Note also that if you would have a great heat, your candle must be great, and also the wick thereof great; but if gentle, let your candle be small.

Another Lamp furnace.

There is another sort of Lamp furnaces with three candles after this manner.



The use of this is when you would have a constant fire that should give a stronger heat then one candle in the former furnace. And the truth is, that if your candles be big (as you may make them as big as you will) you may have as strong a heat this way as by ashes in an ordinary furnace.

To make a Candle that shall last long.

Take unslaked lime, powder it and mix it with your tallow, and so make your candle of that, or else you may make candles of Castle-sope which will serve for such uses as these, *viz.* to burne in such a Lampe furnace.

Note that it is the salt that is in the lime, and sope that preserves the tallow from burning out so fast as otherwise it would.

To make a lasting and durable Oil.

Take unslaked lime, Bay-salt, oil Olive; of each a like quantity, mix them well together, and distill them in sand, cohobate the oil upon the same quantity of fresh lime, and salt: and this do four or five times. By this means will the oil be clear and impregnated with what salt was volatile in the lime, and salt.

Now that saline impregnation is that which gives a durable-
ness to the oil.

Note that this oil while it is distilling is of a most fragrant smell: I have some of it which I distilled seven times, and it is as pure, subtle and odoriferous as many common distilled oiles of vegetables.

This oil besides the durableness of it is also good against any inveterate ach in the limbs.

A Lampe made with this oil will continue burning six times as long as a Lamp made of other oil, as also it burnes very sweet.

There must be a great deal of care used in making of it, or else you will quickly break your glasses: also you must take very strong lime, such as the dyers use, and call cauke.

Philosophicall Bellowes.

There be here set downe three figures of these kindes of instruments, which belong to severall uses.



- A,** Signifies that which blowes a fire for the melting of any metall or such like operation, and it blowes most forcibly with a terrible noise.
B, That which blowes a Candle to make the flame thereof very strong for the melting of glasses, and nipping them up.
C, That which any one may hold in his hand to blow the fire strongly upon any occasion.

Now the manner of the using them in this: you must first heat them very hot, then put the noses thereof (which must have a very small hole in them, no bigger then that a pins head may go in) into a vessell of cold water, and they will presently suck in the water, of which then being full turne the noses thereof towards the candle or fire wch you would have blown.

As

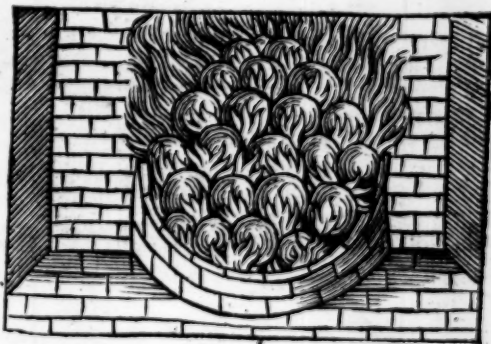
As for the figure C, it must have a mouth drawne up round and hanging out an inch from the face, which mouth (the whole compasse of the face being heated first) you must dip in cold water, and it will suck in water as the noses of the former did. This then you must hold close to the fire that it may be heated, and it will blow exceedingly, as otherwise it will not, viz. if it be cold.

If you put sweet water into such a vessell you may perfume a chamber exceedingly, for a little quantity thereof will be a long time breathing forth.

Note that these kindes of vessels must be made of copper, and be exceeding well closed, that they may have no vent but by their noses.

An excellent invention to make a fire.

Take three parts of the best New-castle coales beaten small, one part of loame, mix these well together into a masse with water, make thereof balls, which you must dry very well.



This fire is durable, sweet, not offensive by reason of the smoake or cinder as other coale fires are, beautifull in shape, and is not so costly as other fire, burnes as well in a chamber even as Char-coal.

This

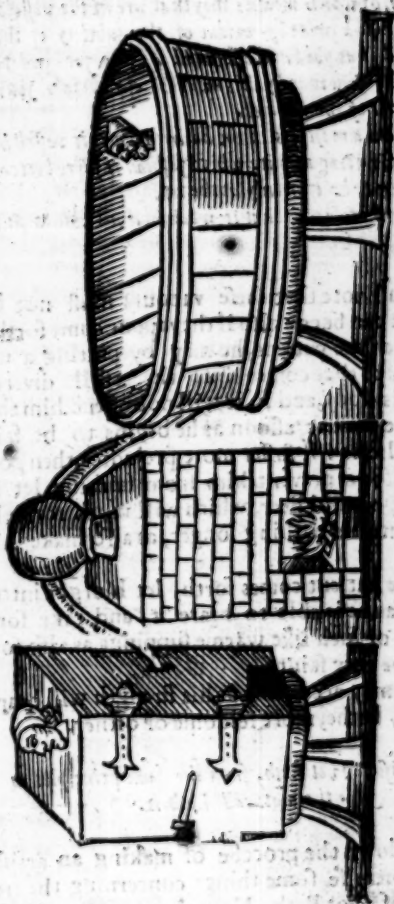
This fire may either serve for such distillations as require a strong, and lasting heat, or for ordinary uses either in the Kitchen, or chambers.

A new invention for Bathes.

Seeing by bathing and sweating most diseases are cured, especially such as proceed from wind, hot and distempered humours or cold and congealed humours, because all these are rarified, and evaporated by transpiration in sweating, or bathing, I thought it a thing much conducing to mans health to set downe such a way of bathing and sweating that might be very effectually, and appropriated to any particular disease or distemper.

I shall therefore here commend to you a way of bathing by distillation, the manner of which you may see by these ensuing vessels.

A, Sig.



- A, Signifies a hot still with two pipes going into two wooden vessels; In this Still you may put either hearbs, spices, with water, or with Spirits, and distill them, by which meanes they that are in the vessels will presently be forced into a sweat by vertue of the subtilty of the vapours. And this indeed is as good and effectuell a way for sweating as any can be invented: You may by this meanes appropriate your ingredients to the nature of the diseases.
- B, A vessell wherein a man sits in the bath. Now this vessell hath in it a door for the easier going into it, which fashion is farre better, and more convenient, then to be open only at the top.
- C, A long vessell where a man that is weak, and not able to sit up, lies and is bathed.

Now you must note that these vapours must not be hotter then the patient can beere: also if the vapour come forth too hot upon the body of the patient, he may by putting a pipe upon the end of the pipe that comes into the vessell, divert the hot vapour from his body, and so it will not offend him that way.

Note that the patient, as soon as he begins to be faint, must come forth or else he will suffer more prejudice, then good by his bathing; and also to prevent him from fainting let him take some Cordiall, or cold Beer, which will much revive him, and make him endure his bathing longer, as also make him sweat the more.

As soon as the patient comes forth, let him goe into a warm bed, and sweat as he is able to beare it, and take some posset drink, or broth or such like warme supping, as also some good Cordiall if he be very faint.

The patient may according as his strength will beare, and his disease require, bathe, more seldome or oftner.

An artificiall hot Bath, from the same principles as the naturall Bath is.

Before I set down the proceſſe of making an artificiall hot Bath, I shall premise some things concerning the true nature and originall of a hot Bath. Now the clearest and best account that I ever heard or read, of the cause of the heat in Bathes is that
which

which is given by Monsieur de Rochas, and that in a demonstrative way; His words are these. As I was (saith he) with some of my companions wandring in *Savoy*, I found in the valley of *Lazerns* betwixt the Alps a hot spring; I began to consider the cause of this heat, and whereas the vulgar opinion is, that the heat of fountains is from mountains fired within, I saw reason to think the contrary, because I saw snow upon a mountaine from whence this hot spring came, unmelted, which could not possibly but have been dissolved by the hot fumes of the mountains, had they been fired. Whereupon being unsatisfied I with my companions and other labourers (whom I could very hardly perswade to undertake such a businesse by reason they were afraid that fire would thereupon breake forth out of the ground and consume us) got tools and set upon digging to find out the true cause of the heat of this fountain. After we had digged 15. dayes (having before perceived the water to be hotter and hotter by degrees as we came neerer to the source) we came to the originall of the heat, where was a great ebullition: In three houres more we digged beyond this place of ebullition and perceived the water to be cold, yet in the same continued stream with the other that was hot: upon this I began to wonder much at the reason of these things. Then I carryed to my lodging some of this hot water (which was both saltish and acid) and evaporated it, and of forty ounces I had in the bottome five drams of saltish matter, which I then yet farther purified, and extracted thence three drams of pure nitrous Hermetick salt; the other two ounces being a slimie sulphurous substance. Yet with this I was not satisfied, but with my labourers went again to the place, and digged twelve days more, and then we came to a water which was insipid as ordinary fountain Water, yet still in a continued stream with the saltish and hot water. At this I wondered much, whereupon I digged up some of the earth where the cold, and saltish stream runned, & carried it home with me, and out of a hundred weight thereof, I extracted a good quantity of nitrous salt, which was almost fluxile. When I had extracted as much as I could, I laid the earth aside, and in 24. houres it was all covered over with salt, which I extracted, and out of a hundred weight of

this earth which I call virgin earth, I had four pound of this kind of salt which is contracted in the aforesaid 24. houres: and so it would doe constantly. Now this satisfied me concerning one doubt: for before I was unsatisfied how there could be a constant supply of that salt which made the water saltish, seeing there was but a little distance betwixt the insipid water and the hot water, and the constant stream of water washed away the salt which was in that little space: for I perceived that this kind of earth attracts this universall salt of the world partly from the aire in the cavities of the earth, and partly from the vapours that constantly passe through the earth. After this I tooke some of that earth where the ebullition was, and carried it home, and proved it, and I perceived it to be a sulphur mine, into which the former acid saltish water penetrating caused an ebullition, as doe salt of Tartar, and Spirit of Vitriall being mixed together, and also water poured on unslaked lime. After this I began to question how it was that this sulphur mine was not consumed, seeing so much matter passeth from it daily: but when I began to understand how all things in the earth did assimilate to themselves whatsoever was of any kind of affinity to them, as Mines convert the tooles of miners into their owne substance in a little time, and such like experiments of that nature, I was satisfied. And after all this I understood how this universall salt of the world was to be had, and I could at any time mix it with water, and pour that water upon sulphur, and so make an artificiall hot bath as good as any naturall bath whatsoever. Note that no salt in the world but this nitrous salt will do it, as I often cryed: And this salt is to be found in all hot bathes, and to be prepared artificially. Thus saith Monsieur de Rochas. Something like unto this Helmont seems to hold forth, saying that there is a *Primum ens salium*, or *semina salium*, which are all seated in waters and vapours and give them an acidity, but as yet have no saline tast, untill they meet with such principles, and be received into certain matrixes in the earth which may make them put forth this potentiall saltiness into act: and according to this diversity of places that this water or vapours, being impregnated with those seeds of salt, goe through,

through, ariseth the diversity of salts, as Alum, sea-salt, Nitre, &c. Then upon this account the earth through which the cold, acid, saltish water above said run through, did specificate that potentiall salt which was both in the water, and vapours, into a nitrous salt, (by which meanes was that kind of salt in that place) but whether this *primæviens salium* be so unspecificated; or *quid Hermaphroditicum* as he asserts, or no, it matters not much to my purpose; it sufficeth if that earth through which that acid nitrous water runs, attracts and multiplies an acid nitrous salt, with which the water being impregnated, and running through a sulphurous mine causeth an ebullition. All this being premised, I shall now endeavor to illustrate how nature may in this be imitated, as that an artificiall hot bath may be made by such like principles, as the naturall hot bath consists of, being artificially prepared.

Now these principles are the sulphur mine, and the acid nitrous salt; the former requires no further preparation (as saith *Monsieur de Rochas*,) if it be pure: the latter is to be prepared two manner of wayes: for either it is to be extracted, as saith the aforesaid author, out of the waters of the bath by evaporating them away, or by condensing the nitrous aire (for indeed as many judicious philosophers are of opinion, the air is wholly nitrous, as it appears by the condensation of it in cold places into Nitre) which his virgins earth did doe, into a salt, which was acid, and almost fluxil. Now when I say that the nitrous salt is to be thus prepared, I do not say that this is the full preparation thereof, for indeed it is yet further to be prepared, and that is by giving it a greater acidity. I question much whether or no the salt being prepared after the aforesaid wayes do retaineth that acidity which is required for that ebullition I spake of, and which the nitrous acid water had before it came to the Mine of Sulphur. For indeed the aforesaid author when he affirmed that he could at any time make an artificiall hot bath, did not say he used the salt prepared only after the 2. former wayes, viz. by extracting it out of the waters of the bath, and making it with his virgin earth which did attract, and condense the nitrousnesse of the aire, but withall by making it so acid that it might cause an ebullition when it

came to be joyned with a sulphur Mine. Now then how to give this Nitre a sufficient acidity is the great question. For the better effecting of this we must consider whence that nitrous water (above mentioned) in the earth had the greatest part of its acidity. As to that, it must be remembered that the virgin earth through which the acid nitrous water did run, did condense the nitrous air or vapours into a nitrous salt, and withall it is to be considered that before this nitrous aire or vapour, before it be condensed, even when it is neer unto condensation is acid, and part of it before condensation is mixed with the water, and so renders it acid. Now that waters have great part of their acidity from the acid vapours of acid Mineralls both *Henricus ab Heers*, and *Jordan* upon Minerall waters affirme: and that salts unbodied, are far more acid then when they have assumed a body, is clearly manifest in this, viz. that spirits of salts, which I call salts unbodied because they have lost their body, are become very acid because unbodied; if so in Spirits that have lost their bodies, why not after some proportion in those that have not yet assumed a body, as vapours of Nitre, or nitrous air being neer to congelation, and bodying, and impregnated with Spirits of Nitre?

Now I say that nitrous vapours, or nitrous air being a salt unbodied, are not so acid as Spirits of Nitre, because they are more phlegmatick and crude, which flegme they lose by being congealed into a salt: yet for all this, they are far more acid then the body of salt: and this is that which *Helmont* understands, when he saith that the esurine salt being incorporificated is far more active, in giving tast and odour then when it hath received its body by becoming a specificated salt. Furthermore how Nitre shall become sufficiently acid for the aforesaid operation is the great matter to be required into. We must therefore consider which way we may unbody Nitre (seeing it is scarce possible to get it before it hath received its body) and that is done two wayes, either by forcing of it into a most sharp Spirit, which is too acid for our intension, or by digesting the whole substance of Nitre into a Liquor moderately acid, which indeed serves for our purpose, and the proesse is this.

Take the purest Nitre you can get, dissolve it in rain water

so as that the water imbibe as much of it as it can. Then put this nitrous water into a common earthen vessell unglazed, which you must set in a cellar. You shall see this vessell in a short time to be white all over on the outside as with a hoar frost, which whitenesse is partly the flowers of the Nitre being the purest part thereof penetrating the vessell, and partly the nitrous aire condensed into Nitre by the coldnesse of the vessell, as also assimilated to the Nitre that penetrated the vessell. I said by the coldnesse of the vessel, because such is the coldnesse of an earthen vessell wherein is Nitre, dissolved in water, that it will being set in snow by the fire side forthwith be freezed. This Nitre you must strike off with a feather, and when you have a sufficient quantity thereof, as three or four pound, put this, or the nitrous salt extracted from bath-waters into a bolt head of glasse, (a pound in each bolt head) that two parts of three be empty, nlp it up, and set it in ashes, and give it a reasonable strong fire, viz. that the upper part of the bōul of the bolt head be as hot, as that you can but well suffer your hand upon it, and you shall see that the Nitre will be dissolved every day a little, and in 2. or 3. moneths time be wholly dissolved, and become acid, but not so acid as the Spirit thereof; then put it into a glasse gourd with a head, and distill it off, and in the bottom you shall find an acid nitrous salt almost fluxil, not unlike the salt which *Monsieur de Rochas* found in the evaporating of this water. Then pour the distilled Nitre water upō the said salt, & then it is for your use.

The use of these principles or ingredients is this, viz. make fountaine water sufficiently acid with this nitrous Liquor, then pour it upon a sufficient quantity of the best Sulphur Mine, or Sulphur vivum in a large wooden vessell where the patient is to be bathed, and you will see the water presently heated so hot as the patient is able to beare.

The inward use of these bath-waters is by reason of the Nitre in them, to dissolve grosse humours, open obstructions, cleanse the kidneys and bladder, and by reason of the sulphur to dry, mollifie, discusse, and glutinate, and to help all uterine effects proceeding from cold and windy humours.

Note that they must be drunk warme, and in a good quantity, or else they will do more hurt then good.

The

The outward use of this is for such ill effects as are in the habit of the body, and out of the veines, as of palsies, contractions, rheumes, cold humors, affects of the skin and aches, for they resolve, disperse, cleanse, mollifie, &c.

Now for the manner of Bathing I shall not prescribe any thing, but leave this to the discretion of the physician, who is to give order and directions for all the circumstances about it: for indeed every one is not to bath when, and how he pleaseth, but must apply himselfe to an able physician, and submit himself to his judgement and experience, or else may receive either prejudice, or no benefit thereby.

An artificiall Tunbridge, and Epseme Water.

It is granted by all, that Tunbridge Water proceeds from an iron mine, but how it attracts that acidity and that ironish and vitriolated tast and odour, seeing upon evaporation thereof, there remains little or no vitrall or salt of iron at the bottom, is the great question; Now for the solution of this, we must consider how many wayes a subterraneall minerall, or metall may communicate its acidity to waters, and that saith *Hentius ab Heers*, upon Spaw-waters, it doth three wayes: one, when the water passing through the mines, carryeth along with it some of the dissoluble parts of the mine, to which is consonant the saying of *Aristotle*: Such are waters, as is the nature of those Mines through which they passe, as also of *Galen* when he saith, that pure water passing through Minerall Mines carry with them some of the substance of the Mines. The second way is when the vapours arising from fermented Mineralls and Metalls, are mixed with waters. Now that vapours retain the odour, and tast of those things, from whence they are raised, *Aristotle* in his fourth Book *Sublimium* affirms, and also *Helmont* when he saith that some parts of the iron Mines being by fermentation turned into a vapour retain the odor and tast of the Mine by vertue of the acid esurine salt, and are not presently reduced into a body, and also artificiall vapours of the iron Mines have more vertue, & activity, (I mean those parts that are raised by a strong fire in a furnace from the Mine of iron) then iron it selfe when it is melted. The third is, when a great quantity of vapours arising from the
aforesaid

aforesaid fermented Mines is elevated, and by the coldnesse of the ambient earth is turned into an acid water, which as it passeth through the earth meeteth with some springs of water, and mixing with them gives them a pleasant acidity. And this is the best of all acid waters being clear and very pure.

This being premised I shall now proceed to the processe of making artificiall waters like to those of Tunbridge and Ep-some: of the former *viz.* Tunbridge thus;

Take of the Mine, or ore of iron, beat it very smal, and put it into the furnace expressed page 83. and there will come forth an acid Spirit, and flowers, which you must mix together till the acid Spirit extracts the salt out of the flowers, then decant off the clear liquor which will have a strong tast and smel of iron.

A few drops of this Liquor put into a glasse full of fountaine water give it the odour and tast of Tunbridge water, and communicate the same operations to it.

It openeth all obstructions, purgeth by urine, cleanseth the kidneys, and bladder, helpeth the pissing of bloud, the stopping of the urine, and difficulty of making water; it allayeth all sharp humors, cureth inward ulcers, and impostumes; cleanseth and strengtheneth the stomach, and liver &c.

Note that fountaine water being made moderately acid with this acid ironish Liquor may be taken from a pint to six pints, but by degrees, and after the taking of it moderate exercise is to be used, and fasting to be observed till all the water be gone out of the body, which will be in seven or eight houres.

Ep-some Water is made artificially thus. Take of the mine of allom, or allom stones, powder it very smal, and distil it in the furnace expressed page 83. and there will distill over a certain acid alluminish water, which must be mixed with a double quantity of Niter water (the preparation whereof is set down in the processe of making the artificiall hot bath). Now you must know that Ep-some water hath a certain kind of acid tast which is partly alluminous and partly nitrous, which proceedeth from nitrous air, and vapours arising from the fermentation of alluminous Mines, being first mixed together, and then mixed with the fountaines passing through the earth.

If you put a few drops of this Liquor into a glasse full of fountaine

fountain water it will give it the odour, and tast of Epsome water, that you shall scarce discern them asunder either by that odour, or operation.

This water is purgative, and indeed purgeth especially all sharp burning humours, cools an inflamed, and opens an obstructed body; cleanseth the kidneys and bladder, cureth inward ulcers, and impostumes, is a very good preservative against the consumption, &c.

Fountain water made acid with this Liquor may be taken from a pint to six or eight, but by degrees, and after it moderate exercise must be used, and fasting till the water be out of the body, only some thin warme suppings may be taken to helpe the working thereof. Some take this water warm.

To make artificiall precious stones of all sorts of colours.

Take CrySTALLINE white pibble-stones that are very white throughout and have no mixture of any other colour, which you shall find in fountains and on the sands of the sea. Put them into a crucible, make them glowing hot (covering the crucible) then cast them into cold water, by which means they will crack, and be easily reduced into a powder; Take the powder thereof, and put the like quantity of pure salt of Tartar thereto, which salt must not be made in any metalline but glasse vessels, that it may have no mixture of any other colour. To this mixture you may adde what colour you please, which must be of a minerall or a metalline nature, then put them into a very strong crucible which must be but half full, and then covered, and there melt them in a strong fire till they become like glasse. Note that when this mixture is in melting you must put an iron rod into it and take up some of it, & if there appear no cornes of gravell in it, it is enough; If otherwise, you must melt it longer. The especiall mineralls and metalls that give colours are these, viz. Copper, iron, silver, gold, Wismut, Magnesia, and granats.

Common copper makes a sea-green; copper made out of iron a grasse-green; granats, a smaragdine-green; iron yellow, or a Hyacinth colour; silver, white, yellow, green, and granat colour; gold a fine skie colour; Wismut common blew; magnesia,

nesia, an amethyft colour: And if you will mix two or three of these together, they will give other colours. For copper and silver mixed together give an amethyft colour: copper, and iron a pale green; Wismut, and magnesia, a purple colour; silver and magnesia divers colours like as an Opall. If you would have this masse not to be transparent but opac, you may adde the calx of tin to it when it is in melting: as if you would make *Lapis lazuli*; then so your mixture coloured with Wismut adde the calx of tin, and this mixture when it is almost ready to congeal cast into a mould where some powder of gold hath been scattered, and by this means it will become full of golden veins very like true *lapis lazuli*, which is very pleasant to behold. You may by these foresaid preparations cast what formes or figures you please, of what colour you please.

The Metals, and Minerals for the making of colours ought to be thus prepared, viz.

Plates of copper must be made red hot, and then quenched in cold water, of which then take five or six graines, and mix them with an ounce of the aforesaid mixture, and melt them all together, and they will colour it sea-green.

Iron must be made into a Crocus in a reverberatory fire, and then eight or ten grains thereof will tinge the mixture into a yellow, or hyacinth colour.

Silver is to be dissolved in *Aqua fortis* and precipitated with Oil of flints, then dulcified with water, and afterward dried, of this five or six graines give a mingled colour.

Gold must be dissolved in *Aqua regia*, and precipitated with the Liquor of flints, then sweetened, and dried, and five or six grains thereof giveth the finest saphir colour to an ounce of the mixture.

If gold be melted with *regulus martis nitrosus*, five or six graines thereof give to an ounce of the masse a most incomparable rubine colour.

Magnesia may be powdred only, and then ten or twelve grains thereof make an amethyft colour.

Wismut must be dissolved in *Aqua regia*, and precipitated with Liquor of flints, then sweetened, and dried; and then of this soure or five graines turne an ounce of the masse into a saphir colour, but not so naturall as gold doth.

Granats may be powder only, and then ten or fifteen grains thereof tinge an ounce of the masse into a fine green colour not unlike to the naturall Smaragdine.

To prove what kinde of metall there is in any Ore, although you have but avery few graines thereof, so as that you cannot make prooffe thereof the ordinary way with lead.

Take two or foure graines (if you have no greater quantity) of any Ore that you have, put it to halfe an ounce of Venice-glasse, and melt them together in a crucible, (the crucible being covered) and according to the tincture that the glasse receiveth from the Ore, so may you judge what kinde of metall there is in the Ore; for if it be a copper Ore, then the glasse will be tinged with a sea-green colour.

If copper and iron, a glasse-green.

If iron, a darke yellow.

If tin, a pale yellow.

If silver, a whitish yellow.

If gold, a fine skie colour.

If gold and silver together, a Smaragdine colour.

If gold, silver, copper, and iron together, an amethyst colour.

A pretty observation upon the melting of Copper and Tin together.

First make two bullets of red copper of the same magnitude, make also two bullets of the purest tin in the same mould, as the others were made: weigh all four bullets, and observe the weight well: then melt the copper bullets first, upon them being melted put the two tin bullets, and melt them together, but have a care that the tin fume not away. Then cast this molten mixture in the same moulds as before, and it will scarce make three bullets, but yet they weigh as heavy as they did before they were melted together.

I suppose the copper condenseth the body of the tin, which before was very porous, which condensation rather addes then diminisheth the weight thereof.

A remarkable observation upon the melting of Salt Armoniack, and Calx vive together.

Take Salt armoniack, and Calx vive, of each a like quantity, mix, and melt them together. Note that Calx of it selfe will not melt in lesse then eight houres with the strongest fire that can be made, but being mixed with this salt melts in half an houre, and lesse, like a metall, with an indifferent fire.

This mixture being thus melted becomes a hard stone, out of which you may strike fire as out of a flint, which if you dissolve again in water, you shall have the Salt armoniack in the same quantity as before, but fixed.

Note that hard things have their congelation from Salt armoniack, as hornes, bones and such like; for little fixed salt can be extracted from them, only volatile and armoniack.

An ounce of any of these volatile salts, (as of hornes, bones, amber, and such like) reduced into an acid Lignor by distillation, condenseth, and indurath a pound of Oily matter.

An easie and cheap powder like unto aurum fulminans.

Take of salt Tartar one part, Salt-peter three parts, Sulphur a third part, grind these well together, and dry them. A few graines of this powder being fired will give as great a clap as a musket when it is discharged.

To make an Antimoniall cup, and to cast divers figures of Antimony.

Take the best crude antimony very well powdered, Nitre, of each a pound, of crude Tartar finely powdered two pound, mix them well together, and put them into a crucible, cover the crucible, and melt them, and the regulus will fall to the bottom, and be like a melted metall, then pour it forth into a brasse mortar, being first smeared over with Oil.

Or,

Take two parts of powdered Antimony, and four parts of powder of crude Tartar, melt these as aforesaid.

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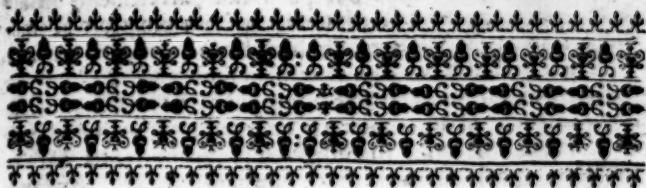
This regulus you may (when you have made enough of it) melt again and cast it into what moulds you please, you may either make cups, or what pictures you please, and of what figures you please. You may cast it into formes of shillings or halfe-crowns, either of which if you put it into two or three ounces of wine in an earthen glazed vessell, or glasse, and infuse in a moderate heat all night, you may have a Liquor in the morning which will cause vomit: of which the dose is from two drams to two ounces and half.

Note that in the Wine you may put a little Cinamon to correct and give a more gratefull relish to it.

It is the custome to fill the Antimoniall cup with Wine, and to put as much Wine round about betwixt that and the litle earthen cup where it stands, and so infuse it all night, and then drink up all that Wine: but I fear, that so much Wine will be too much as being three or four ounces when as we seldome exceed the quantity of two ounces of the infusion of Antimony.

These cups, or pictures will last for ever, and be as effectuell after a thousand times infusion as at first: and if they be broken at any time, (as easily they may being as brittle as glasse) they may be cast again into what formes you please.

Note that he that casts them must be skilfull in making his spawde, as also in scouring of them, and making them bright afterwards: for if they be carefully handled they will look even as bright as silver.



BOOK VI.

The Spagyricall Anatomy of Gold, and Silver, together with the Curiosi- ties therein, and chiefeſt prepara- tions thereof.

I Shall first endeavour to shew whence Gold had its originall, and what the matter thereof is. As Nature (saith *Sandivogius*) is in the will of God, and God created her: so nature made for her selfe a seed, (*i.*) her will in the elements. Now she indeed is one, yet she brings forth divers things; but she operates nothing without a Sperme: whatsoever the Sperme will, nature operates, for she is as it were the instrument of any artificers. The Sperme therefore of every thing is better, and more profitable then nature her self: for thou shalt from nature without a Sperme, doe as much as a goldsmith without fire, or a husband without grain or seed. Now the Sperme of any thing is the Elixir, the balsame of sulphur, and the same as *Humidum Radicale* is in metall: but to
pro-

proceed to what concernes our purpose. Four elements generate a Sperme, by the will of God, and imagination of nature: For as the Sperme of a man hath its center, or the vessell of its seed in the kidneys: so the foure elements by their indelinent motion (every one according to its quality) cast forth a Sperme into the center of the earth, where it is digested, and by motion is sent abroad. Now the center of the earth is a certaine empty place, where nothing can rest: and the foure elements send forth their qualities into the circumference of the center. As a male sends forth his seed into the womb of the female, which after it hath received a due portion casts out the rest, so it happens in the center of the earth, that the magnetick powder of a part of any place attracts something convenient to it selfe for the bringing forth of something, and the rest is cast forth into stones and other excrements. For every thing hath its originall from this fountain, and there is nothing in the world produced but by this fountain: as for example, set upon an even table a vessell of water, which may be placed in the middle thereof, and round about it set divers things, and divers colours, also salt, &c. every thing by it selfe: then poure the water into the middle; and you shall see the water to run every way, and when any streame toucheth the red colour, it will be made red by it, if the salt, it will contract the tast of salt from it, and so of the rest; Now the water doth not change the places, but the diversity of places changeth the water. In like manner the seed or sperme being cast forth by the foure elements from the center of the earth unto the superficies thereof passeth through various places, and according to the nature of the place is any thing produced: if it come to a pure place of earth, and water, a pure thing is made.

The seed, and sperme of all things is but one, and yet it generates divers things, as it appears by the former example. The sperme whilst it is in the center is indifferent to all forms, but when it is come into any determinate place, it changeth no more its forme. The sperme whilst it is in the center can as easily produce a tree, as a metall, and an hearb as a stone, and one more precious then another according to the

purity of the place. Now this sperme is produced of elements thus. These foure elements are never quiet but by reason of their contrariety mutually act one upon another, and every one of its selfe sends forth its own subtilty, and they agree in the center. Now in this center is the *Archem*, the servant of nature, which mixing those spermes together sends them abroad, and by distillation sublimes them by the heat of a continuall motion unto the superficies of the earth: For the earth is porous, and this vapour (or wind, as the philosophers call it) is by distilling through the pores of the earth resolved into water, of which all things are produced. Let therefore as I said before, all sons of Art know that the sperme of metals is not different from the sperme of all things being, *viz.* a humid vapour. Therefore in vain do Artists endeavour the reduction of metals into their first matter, which is only a vapour. Now saith *Bernard Trevisan* when philosophers speak of a first matter they did not meane this vapour, but the second matter which is an unctuous water, which to us is the first, because we never find the former. Now the specification of this vapour into distinct metals is thus. This vapour passeth in its distillation through the earth, through places either cold, or hot; if through hot, and pure where the fatnesse of sulphur sticks to the sides thereof, then that vapour (which philosophers call the Mercury of philosophers) mixeth, and joyneth it self unto that fatnesse, which afterward it sublimes with it selfe, and then it becomes, leaving the name of a vapour, and unctuousity, which afterwards coming by sublimation into other places, which the antecedent vapour did purge, where the earth is subtle, pure, and humid, fills the pores thereof, and is joyned to it; and so it becomes gold: and where it is hot, and something impure, silver. But if that fatnesse come to impure places, which are cold, it is made lead: and if that place be pure and mixed with sulphur, it becomes copper: for by how much the more pure and warm the place is, so much the more excellent doth it make the metals.

Now this first matter of metals is a humid, viscous, incombustible, subtle substance, incorporated with an earthy subtilty, being equally, and strongly mixed *per minima* in the caverns of

the earth. But as in many things there is a twofold unctuousity (whereof one is as it were internall, retained in the center of the thing lest it should be destroyed by fire, which cannot be without the destruction of the substance it selfe wherein it is: the other as it were externall, seculent and combustible) so in all metalls except gold, there is a twofold unctuousity: the one which is externall, sulphurous, and inflamable, which is joynd to it by accident, and doth not belong to the totall union with the terrestrial parts of the thing: the other is internall, and very subtile, incombustible, because it is of the substantiall composition of *Argent vive*, and therefore cannot be destroyed by fire, unlesse with the destruction of the whole substance, whence it appears what the cause is that metalls are more or lesse durable in the fire: For those which abound with that internall unctuousity are lesse consumed, as it appears in silver, and especially in gold. Hence *Rosarium* saith, the philosophers could never by any meanes find out any thing that could endure the fire; but that unctuous humidity only which is perfect, and incombustible. *Geber* also asserts the same, when he saith that imperfect bodies have superfluous humidities, and sulphureity generating a combustible blacknesse in them, and corrupting them; they have also an impure, seculent and combustible terrestriety so grosse, as that it hinders ingression, and fusion: but a perfect metall, as gold, hath neither this sulphurous or terrestriall impurity; I mean when it is fully matured and melted, for whilest it is in concoction it hath both joynd to it, as you may see in the golden Ore, but when they doe not adhere to it so, but that it may be purified from them, which other metalls cannot, but are both destroyed together if you attempt to separate the one from the other: Besides gold hath so little of these corruptible principles mixed with it, that the inward sulphur or metalline spirit doth sometimes and in some places overcome them of it selfe, as we may see in the gold which is found very pure sometimes in the superficies of the earth, and in the sea sands, and is many times as pure as any refined gold.

Now this gold which is found in sands and rivers, is not generated there, as saith *Gregorius Agricola* in his third book de

Re Metallica, but is washed down from the mountains with fountaines that run from thence. There is also a flaming gold found (as *Paracelsus* saith) in the tops of mountaines, which is indeed separated of it selfe from all impurities, and is as pure as any refined gold whatsoever. So that you see, that gold although it had an extrinsecall sulphur and earth mixed with it, yet it is sometimes separated from it of it selfe, viz. by that fiery spirit that is in it. Now this pure gold (as saith *Sandivogius*) nature would have perfected into an elixir but was hindred by the crude air, which crude air is indeed nothing else but that extrinsecall sulphur which it meets with and is joyned to in the earth, and which fills with its violence the pores thereof, and hinders the activity of the Spirit thereof; and this is that prison which the sulphur (as saith the aforesaid author) is locked up in, so that it cannot act upon its body, viz. Mercury, and concoct it into the seed of gold; as otherwise it would doe: and this is that darke body (as saith *Penotus*) that is interposed betwixt the philosophicall Sunne and Moone, and keeps off the influences of the one from the other. Now if any skilfull philosopher could wittily separate this adventitious impurity from gold whilest it is yet living, he would set sulphur at liberty, and for this his service he would be gratified with three kingdoms, viz. Vegetable, Animall, and Minerall, I mean he could remove that great obstruction which hinders gold from being digested into the Elixir. For, as saith *Sandivogius*, the Elixir, or Tincture of philosophers, is nothing else but gold digested into the highest degree: for the gold of the vulgar is as an hearb without seed, but when gold (i. e.) living gold (for common gold never can by reason that the Spirits are bound up, and indeed as good as dead and not possibly to be reduced to that activity which is required for the producing of the sperme of gold) is ripened it gives a seed, which multiplies even *ad infinitum*. Now the reason of this barrenness of gold that it produceth not a seed is the aforesaid crude aire, viz. impurities: You may see this illustrated by this example.

We see that Orange-trees in *Polonia* doe grow like other trees, also in *Italy*, and elsewhere, where their native soyle

is, and yeeld fruit, because they have sufficient heat, but in these colder colder countreys they are barren and never yeeld any fruit, because they are oppressed with cold: but if at any time nature be wittily and sweetly helped, then Art can perfect what nature could not. After the same manner it is in metall; for gold would yeeld fruit, and seed in which it might multiply it selfe, if it were helped by the industry of the skillfull artift, who knew how to promote nature, (i.) to separate these sulphurous and earthly impurities from gold. For there is a sufficient heat in living gold, which if it were stirred up by extrinsecall heat, to digest it into a seed. By extrinsecall heat I doe not mean the heat of the celestially Sun, but that heat which is in the earth and stirres up the seed, (i.) the living spirit that is in all subteraneall sperms to multiply, and indeed makes gold become gold. Now this is a heat of putrefaction occasioned by acid spirits fermenting in the earth, as you may see by this example related by *Albertus Magnus*, but to which the reason was given by *Sandivogius*. There was saith the former author, certaine graines of gold found betwixt the teeth of a dead man in the grave: wherefore he conceived there was a power in the body of man to make and fixe gold: but the reason is farre otherwise, as saith the latter authour: for saith he, *Argent vive* was by some physician conveyed into the body of this man when he was alive, either by unction, or by turbith, or some such way, as the custome was; and it is the nature of Mercury to ascend to the mouth of the patient, and through the excoriation of the mouth to be avoided with the flegme. Now then if in such a cure the sick man dyed, that Mercury not having passage out remained betwixt the teeth in the mouth, and that carcassee became the naturall vessell of Mercury, and so for a long time being shut up was congealed by its proper sulphur into gold by the naturall heat of putrefaction, being purified by the corrosive flegme of the carcassee, but if the minerall Mercury had not been brought in thither, gold had never been produced there: And this is a most true example that as mercury is by the proper sulphur that is in it selfe, being stirred up and helped by an extrinsecall heat, coagulated into gold, unlesse it be hindred by
and

any accident, or have not a requisite extrinsecall heat, or convenient place, so also that nature doth in the bowels of the earth produce of Mercury only gold and silver, and other metall; according to the disposition of the place, and matrix; which assertion is further cleared by the rule of reduction, for if it be true that all things consist of that which they may be reduced into, then gold consists of Mercury, because (as most grant, *Paracelsus* affirms, and many at this day professe they can doe) it may be reduced into it. There is a way by which the tincture of gold which is the soule thereof, and fixeth it, may be so fully extracted that the remaining substance will be sublimed like Arsenick, and may be as easily reduced into Mercury as Sublimate. If so, and if all Mercury may be reduced into a transparent water, as it may (according to the processe set down page 75. and as I know how another better and easier way to turn a pound of Mercury of it self into a clear water in halfe an houre, which is one of the greatest secrets I know, or care to know, together with what may be produced thence, and shall crave leave to be silent in) why may not that water in some sense, if it be well rectified, be called a kinde of living gold out of which you may perhaps make a medicine, and a menstruum unfit for the vulgar to know. It appears now from what is premissed that the immediate matter of gold is probably Mercury, and not certaine salts and I know not what as many dream of, and that the extrinsecall heat is from within the earth, and not the heat of the sun, as some imagine (because in the hottest countreys there is all, or almost all gold generated) who if they considered that in cold countreys also are, and as in *Scotland* were gold mines in King *James* his time, would be of another mind then to think that the celestially sun could penetrate, so as to heat the earth so deep as most gold lies.

I now having in some measure discovered what the intrinsecall, and extrinsecall heat, and the matter of gold is, I shall next endeavour to explaine what those three principles are, viz. Salt, Sulphur, and Mercury, of which *Argent vive*, and gold consist: Know therefore that after Nature had received from the most High God the priviledge of all things upon the Monarchy

Of this world, she began to distribute places, and provinces to every thing, according to its dignity; and in the first place did constitute the four elements to be the princes of the world, and that the will of the most High (in whose will Nature is placed) might be fulfilled, ordained that they should act upon one another incessantly. The fire therefore began to act upon the aire, and produced sulphur: The air also began to act upon the water, and produced Mercury: the water also began to act upon the earth, and produced salt. Now the earth not having where to act produced nothing, but became the subject of what was produced. So then there were produced three principles, but our ancient philosophers not so strictly considering the matter described only two acts of the elements, and so named but two principles, *viz.* Sulphur and Mercury: or else they were willing to be silent in the other, speaking only to the top of Art.

The Sulphur therefore of philosophers, (which indeed is the sulphur of metallis, and of all things) is not, as many think, that common combustible sulphur which is sold in shops, but is another thing farre differing from that, and is incombustible, not burning, nor heating, but preserving, and restoring all things which it is in, and it is the *Calidum Innatum* of every thing, the fire of nature, the created light, and of the nature of the sun, and is called the Sun; so that whatsoever in any thing is fiery, and airy, is sulphur, not that any thing is wholly sulphureous, but what in it is most thin, and subtle, having the essence of the naturall fire, and the nature of the created light, which indeed is that sulphur which wise philosophers have in all ages with great diligence endeavoured to extract, and with its proper Mercury to fix, and so to perfect the great Magistery of nature. Now of all things in the world there is nothing hath more of this sulphur in it then gold and silver, but especially gold, insomuch that oftentimes it is called sulphur, (*i.*) because sulphur is the most predominant, and excellent principle in it, and being in it more then in all things besides.

Mercury is not here taken for common *Argent vive*; but it is the *Humidum Radicale* of every thing, that pure aqueous, unctu-

unctuous, and viscous humidity of the matter, and it is of the Nature of the Moon, and it is called the Moone, and that for this reason, *viz.* because it is humid, as also because it is capable of receiving the influence and light of the Sun, *viz.* sulphur.

Salt is that fixt permanent earth which is in the center of every thing that is incorruptible, and inalterable, and it is the supporter and nurse of the *Humidum Radicale*, with which it is strongly mixt. Now this salt hath in it a seed, *viz.* its *Calidum Innatum*, which is Sulphur, and its *Humidum Radicale* which is Mercury; and yet these three are not distinct or to be separated, but are one homogeneous thing, having upon a different account divers names: for in respect of its heat, and fiery substance it is called Sulphur, in respect of its humidity, it is called Mercury, and in respect of its terrestriall siccity it is called salt, all which are in gold perfectly united, depurated, and fixed.

Gold therefore is most noble, and solid of all metall's, of a yellow colour, compacted of principles digested to the utmost height, and therefore fixed.

Silver is in the next place of dignity to Gold, and differs from it in digestion chiefly, I said chiefly, because there is some small impurity besides, adhering to silver.

Now having given some small account of the original matter, first, and second, and manner of the growth of gold, I shall in the next place set downe some curiosities therein, and preparation thereof. The preparations are chiefly three, *viz.* *Aurum potable*, which is the mixtion thereof with other Liquors: Oil of gold, which is gold liquid by it selfe without the mixture of any other Liquor: and the tincture, which is the extraction of the colour thereof.

Dr. Anthony's famous Aurum potable, and Oil of gold.

Dissolve pure fine gold in *Aqua regis* according to art (the *Aqua regis* being made of a pound of *Aqua fortis*, and foure ounces of salt Armoniack distilled together by Retort in sand) which clear solution put into a large glasse of a wide neck, and

and upon it pour drop by drop Oil of Tartar made *per deliquium*, untill the *Aqua regis* which before was yellow become clear, and white, for that is a signe that all calx of gold is seled to the bottome: then let it stand all night, and in the morning pour off the clear Liquor, and wash the calx four or five times with common spring water, being warmed, and dry it with a most gentle heat.

Note, and that wel, that if the heat be too great, the calx takes fire presently like Gun-powder and flies away to thy danger and losse, therefore it is best to dry it in the sun, or on a stone, stirring it diligently with a wooden spatle. To this calx adde halfe a part of the powder of sulphur, mix them together and in an open crucible let the sulphur burne away in the fire, putting a gentle fire to it at the first, and in the end a most strong fire for the space of an houre, that the calx may in some manner be reverberated, and become most subtle, which keep in a viall close stopd for your use.

Then make a Spirit of urine after this manner, *viz.* Take the urine of a healthy man drinking Wine moderately, put it into a gourd, which you must stop close, and set in horse-dung for the space of forty dayes, then distill it by Alembick in sand into a large receiver, untill all the humidity be distilled off. Rectifie this Spirit by cohobation three times, that the Spirit only may rise. Then distill it in sand by a glasse with a long neck, having a large receiver annexed, and closed very well to it, and the Spirit will be elevated into the top of the vessell like crystall without any aqueous humidity accompanying of it. Let this distillation be continued, untill all the Spirits be risen. These crystalls must be dissolv'd in distilled rain-water, and be distilled as before, this must be done six times, and every time you must take fresh rain-water distilled. Then put these crystalls into a glasse bolt-head, which close Hermetically, and set in the moderate heat of a Balneum for the space of fifteen dayes, that they may be reduced into a most clear Liquor. To this Liquor adde an equall weight of Spirit of Wine, very well rectified, and let them be digested in Balneum the space of twelve dayes, in which time they will be united.

Then

Then take the calx of gold aforesaid, and poure upon it of these united Spirits as much as will cover them three fingers breadth, and digest them in a gentle heat, untill the Liquor be tinged as red as blood; decant off the tincture, and put on more of the aforesaid Spirits; and do as before till all the tincture be extracted, then put all the tincted Spirits together, and digest them ten or twelve dayes, after which time abstract the Spirit with a gentle heat, and cohobate it once; and then the calx will remain in the bottome like an Oil as red as blood, and of a pleasant odour, and which will be dissolved in any Liquor. Whereof this Oil may be the *Succedaneum* of true gold. If you distill the same solution by Retort in sand there will come over after the first part of the menstruum, the tincture with the other part thereof, as red as blood, the earth which is left in the bottome of the vessell being black, dry, spongiouse and light. The menstruum must be vapoured away, and the Oil of gold will remain by it self, which must be kept as a great treasure: and this is Dr. Anthony's *Aurum potabile*.

Four or eight graines of this Oil taken in what manner soever wonderfully refresheth the Spirits, and workes severall wayes, especially by sweat.

The true Oil of Gold.

Take an ounce of lease-gold, dissolve it in foure ounces of the rectified water of Mercury expressed page 75. digest them in horse-dung the space of two moneths, then evaporate the Mercuriall water, and at the bottome you shall have the true Oil of gold, which is radically dissolved.

Another proceffe hereof you may see page 71.

A Tincture of Gold.

Dissolve pure gold in *Aqua regia*, precipitate it with the Oil of sand into a yellow powder, which you must dulcifie with warme water, and then dry it (this will not be fired as *Aurum fulminans*) This powder is twice as heavie as the gold

that was put in, the cause of which is the salt of the flints precipitating is selfe with the gold. Put this yellow powder into a crucible, and make it glow a little, and it will be turned into the highest, and fairest purple that ever you saw, but if it stand longer it will be browne. Then poure upon it the strongest Spirit of salt (for it will dissolve it better then any *Aqua regis*) on which dissolution poure on the best rectified Spirit of Wine, and digest them together, and by a long digestion, some part of the gold will fall to the bottome like a white snow, and may with Borax, Tartar and salt Nitre be melted into a white metall as heavy as gold, and afterwards with Antimony may recover its yellow colour againe, then evaporate the Spirit of salt, and of Wine, and the gold Tincture remaineth at the bottome and is of great vertue.

Another Tincture of Gold.

Take of the afore said yellow Calx of gold precipitated with Oil of sand, one part, and three or four parts of the Liquor of sand, or of crystals; mix them well together, and put them into a crucible in a gentle heat at first, that the moisture of the Oil may vapour away (which it will not do easily because the dryness of the sand retains the moisture thereof, so that it flyeth away like molten allum, or borax) when no more will vapour away, encrease your fire, till the crucible be red hot, and the mixture cease bubbling: then put it into a wind furnace and cover it that no ashes fall into it, and make a strong fire about it for the space of an houre, and the mixture will be turned into a transparent Rubie. Then take it out, and beat it, and extract the tincture with Spirit of wine, which will become like shin bloud, and that which remains undissolved may be melted into a white metall as the former.

Another Tincture of Gold.

Hang plates of gold over the fume of *Argent vivo*, and they will become white, friable, and fluxil as wax. This is called the *Magnesia* of gold, as saith *Paracelsus*, in finding out of which (saith he) philosophers, as *Thomas Aquinas*, and *Rapiscissa* with their followers took a great deale of paines, but in vaine, and it is a memorable secret and indeed very singular for the melting of metals that are not easily fluxil. Now then gold being thus prepared, and melted together with the Mercury, is become a brittle substance, which must be powdered and out of it a tincture may be drawn for the transmuting of metals.

Another Tincture.

Take halfe an ounce of pure gold, dissolve it in *Aqua regis*, precipitate it with Oil of flints, dulcifie the calx with warme water and dry it, and so it is prepared for your work. Then take *Regulus Martis* powdered, and mix it with three parts of salt Nitre, both which put into a crucible and make them glow gently at first, then give a strong melting fire, and then this mixture will become to be of a purple colour, which then take out, and beat to powder, and add to three parts of this, one part of the calx of gold prepared as before, put them into a wine furnace in a strong crucible, and make them melt as a metall, so will the *Nitrum antimoniacum* in the melting take the calx of gold to it selfe, and dissolve it, and the mixture will become to be of an Amethyst colour. Let this stand flowing in the fire till the whole masse be as transparent as a Rubine, which you may try by taking a little out and cooling of it. If the mixture do not flow well, cast in some more salt Nitre. When it is compleatly done cast it forth being flowing into a brazen mortar, and it will be like to an orientall Rubine, then powder it before it be cold, then put it into a viall and with the Spirit of Wine extract the tincture.

This is one of the best preparations of gold, and of most excellent use in medicine.

Another Tincture.

First make a furnace fit for the purpose, which must be close at the top and have a pipe to which a recipient with a flat bottome must be fitted: When this furnace is thus fitted, put in three or foure graines, not above at once, of *Aurum fulminans*, which assoon as the furnace is hot, flyeth away into the recipient through the pipe like a purple coloured fume, and is turned into a purple coloured powder, then put in three or four grains more, and doe as before, till you have enough flowers of gold (that which flyeth not away but remaineth at the bottome, may with borax be melted into good gold) then take them out and pour upon them rectified Spirit of Wine tartarized, and digest them in ashes till the spirit be coloured bloud red, which you must then evaporate and at the bottome will be a bloud red tincture of no small vertue.

Aurum fulminans.

Take the purest gold you can get, pour on it four times as much *Aqua regia*, stop your glasse with a paper, and set it in warme ashes, so will the *Aqua regia* in an houre or two take up the gold, and become a yellow water, if it be strong enough: (be sure that your gold hath no copper in it, for then your labour will be lost) because the copper will be precipitated with the gold, and hinder the firing thereof) then pour on this yellow water drop by drop pure Oil of Tartar made *per deliquium*, so will the gold be precipitated into a dark yellow powder, and the water be clear. Note that you pour not on more Oil of Tartar then is sufficient for the precipitation, otherwise it will dissolve part of the precipitated gold to thy prejudice. Pour off the clear Liquor by inclination, and dulcifie the calx with distilled rain-water warmed. Then set this calx in the sun, or some warme place to dry, but take great heed, and especiall care that you set it not in a place too hot, for it will presently take fire, and fly away like thunder, not without great danger to the standers by, if the quantity be great.

great. This is the common way to make *Aurum fulminans*, and it hath considerable difficulties in the preparation. But the best way is to precipitate gold dissolved in *Aqua regia* by the Spirit of salt Armoniack or of urine, for by this way the gold is made purer then by the other, and giveth a far greater crack and sound. Note that the salt of the Spirits which is precipitated with the gold must be washed away, and the gold dulcified as before.

A few grains of this being fired give a crack and sound as great as a musket when it is discharged, and will blow up any thing more forcibly, far then gunpowder, and it is a powder that will quickly and easily be fired.

This is of use for physick as it is in powder, but especially it is used in making the foregoing tincture.

To make gold grow in a glasse like a tree, which is called the golden tree of the Philosophers.

Take of Oil of sand as much as you please, pour upon it the same quantity of Oil of Tartar *per deliquium*, shake them well together that they be incorporated and become as one Liquor of a thin consistence, then is your Menstruum or Liquor prepared. Then dissolve gold in *Aqua regia*, and evaporate the Menstruum and dry the Calx in the fire, but make it not too hot, for it will thereby lose its growing quality, then take it out and break it into little bits, not into powder, put those bits into the aforesaid Liquor (that they may lye a fingers breadth the one from the other) in a very clear glasse. Keep the Liquor from the air, and you shall see that those bits of the calx will presently begin to grow; first they will swell, then they will put forth one or two stems, then divers branches and twigs so exactly, as that you can not chuse but exceedingly to wonder. This growing is reall, and not imaginary only. Note that the glasse must stand still, and not be moved.

Another way.

Calcine fine gold in *Aqua regia*, that it become a calx, which put into a gourd glasse, and pour upon it good and fresh *Aqua regia*, and the water of gradation, so that they cover the calx four fingers breadth, this Menstruum abstract in the third degree of fire untill no more will ascend. This distilled water pour on it again and abstract it as before, and this do so often till you see the gold rise in the glasse, and grow in the forme of a tree having many boughs and leaves.

To make Gold grow and be increased in the earth.

Take leaves of gold, and bury them in the earth which looks towards the East, and let it be often soiled with mans urine, and doves dung, and you shall see that in a short time they will be increased.

The reason of this growth I conceive may be the golds attracting that universall vapour and sperme that comes from the center through the earth (as hath been spoken in the anatomy of gold) and by the heat of putrefaction of the dung purifying and assimilating it to it selfe.

A remarkable observation upon a golden Marcassite.

There is found a certaine stone in Bononia, which some call a golden Marcassite, some a solarie Magnes, that receives light from the sun in the day time, and gives it forth in the dark. About this there have been much reasoning amongst Philosophers, as whether light be really a body, or any kinde of substance, or any accident only, and whether this stone had any gold in it or no, and what it did consist of. Hee that first discovered it thought that he had found a thing that would transmute metals into gold, (by which it appears that there seemed to be something of gold in it or something more glorious then gold) but his hopes were frustrated by a fruitlesse labour,

bour, notwithstanding which I conceive there might be some immature or crude gold in it; for crude gold is a subject (being there is some life in it) that is most fit to receive the influences of the sun according to the unanimous consent of all Philosophers, and therefore is by them not only called Solary but Sol (*i.*) the Sun it selfe.

It is prepared for the receiving of light thus, it is calcined two wayes, first it is brought into a most subtile powder with a very strong fire in a crucible; secondly, being thus brought in to a powder, is made up into cakes as big as a doller, or a piece of eight, either with common water alone, or with the white of an egge, put those cakes being dried by themselves into a Winde Furnace S S S, with coales, and calcine them in a most strong fire for the space of foure or five houres. When the furnace is cold take them out, and if they be not sufficiently calcined the first time, (which is known by their giving but little light,) then reiterate the calcination after the same manner as before, which is sometimes to be done thrice. That is the best which is made with the choicest stones that are clean, pure, and diaphanous, and gives the best light. With this being powdered you may make the fornices of divers animalls of what shapes you please, which you must keep in boxes, and they will receive light from the sun in the day time, give light in the night, or in a darke place, which light will vanish by degrees.

The vertues of the aforesaid preparations of Gold.

With the aforesaid preparations the Ancients did not only preserve the health and strength of their bodies, but also prolong their lives to a very old age, and not that only, but cured thorowly the Epileptic, Apoplexie, Elephantiasis, Leprosy, Melancholy, Madnesse, the Quartain, the Gout, Dropsie, Pains, all manner of Feavers, the Jaundise, Lues venerea, the Wolfe, Cancer, *Noli ne tangere*, Asthma, Consumption, the Stone, stopping of Urine, inward Impostumes, and such like diseases, which most men account incurable. For there is such a potent fire lying in prepared gold, which doth not only consume

sume deadly humours, but also renews the very marrow of the bones, and raiseth up the whole body of man being halfe dead.

They that use any of these preparations for any of the foregoing diseases, must betake themselves to their bed for the space of two or three houres, and expect sweating to ensue, for indeed it will send forth sweat plentifully, and with ease, and leave no impurity or superfluity in the whole body. Note that they must take it for ten dayes together in appropriated Liquors.

Let young men that expect long life, take any of the aforesaid preparations once in a moneth, and in the morning; but they must abstain from meat and drink, till the evening of the same day, for in that time that matter will be digested into the radicall humour; whereby the strength of the body is wonderfully increased, beauty doth flourish most wonderfully, and continues till extreme old age.

Let old men take it twice in a moneth, for by this meanes will their old age be fresh till the appointed time of death.

Let young women and maids take it once in a moneth after their menstrua, for by this means they will look fresh and beautiful.

Let women that are in travell take it, and it will help and strengthen them to bring forth without much paine, notwithstanding many difficulties.

Let it be given to women that have past the years of their menstrua once or twice in a moneth, and it will preserve them very fresh, and many times cause their menstrua to returne, and make them capable again of bearing children.

It cures the plague, and expells the matter of a carbuncle by sweat most potently.

When I say that this, or it will do thus or thus, I mean any one of the forenamed preparations, viz. *Aurum potabile*, Oils, or Tincture of gold.

The preparations of Silver in generall.

All the severall preparations of gold may, except that of *Aurum fulminans*, be applyed to silver, of which being thus prepared the vertues are inferior to those of gold, yet come neerer to them then those of any other matter whatsoever, or howsoever prepared.

Note that silver hath some peculiar preparations which neither gold or any other metall are capable of.

A green Tincture of Silver.

Take fine silver, and dissolve it in twice so much rectified Spirit of Nitre, then abstract halfe of the said Spirit in sand, let it stand a day or two in a cold place, and much of the silver will shoot into Crystals, and in oft doing most of it.

These Crystals are very bitter, yet may be made into pills, and taken inwardly from three grains to twelve; they purge very securely, and gently, and colour the lips, tongue, and mouth, black. If in this dissolution of silver before it be brought to crystals, halfe so much Mercury be dissolved and both shoot together into crystals, you shall have a stone not much unlike to allum. This purgeth sooner, and better, and is not so bitter; It coloureth the nails, hair, skin, if it be dissolved in rain-water; with a lovely brown, red, or black, according as you put more or lesse thereof.

Take of the aforesaid crystals of silver, mix with them a like quantity of pure Salt-peter well powdered, then put this mixture into the distilling vessell expressed page 76. at the bottom of which must be powdered coales to the thicknesse of two fingers breadth, then make a strong fire that the vessell and coales be red hot, put in a dram of the aforesaid mixture, and it will presently sublime in a silver fume, into the recipient, which being settled, put in more, and so do till you have enough Take out the flowers, and digest them in the best alcoholized Spirit of Wine, that thereby the tincture may be extracted, which will be green.

A green Oil of Silver.

Take of the abovesaid crytalls of silver one part, of Spirit of salt armoniack two or three parts, digest them together in a glasse with a long neck, well stoppt, twelve or fourteen dayes, so will the spirit of salt armoniack be coloured with a very specious blew colour, pour it off, and filter it, then put it into a small Retort, and draw off most of the Spirit of armoniack, and there will remain in the bottome a grass-green Liquor. Then draw off all the Spirit, and there will remain in the bottome a salt, which may be purified with Spirit of Wine, or be put into a Retort, and then there will distill off a subtile Spirit, and a sharp Oil.

This green Liquor is of great use for the gilding of all things presently.

If you take common rain-water distilled, and dissolve, and digest the abovesaid crytalls of silver for a few dayes, you shall after the appearance of divers colours find an essence at the bottome, not so bitter as the former, but sweet, and in this Liquor may all metals in a gentle heat by long digestion be maturated, and made fit for medicine; but note that they must first be reduced into salts, for then they are no more dead bodie, but by this preparation have obtained a new life, and are the metals of Philosophers.

To make Oil of Silver per deliquium.

Take of the abovesaid salts, or crytalls of silver, and reverberate them in a very gentle fire, then put them into a cellar on a marble stone, and they will in two moneths time be resolved into a Liquor.

To make a Liquor of Silver, that shall make the glasse wherein it is so exceeding cold, that no man is able for the coldnesse thereof to hold it in his hand any long time.

Take the abovesaid salt of silver, pour upon it the spirit of salt armoniack and dissolve it throughly, and it will do as abovesaid.

With

With a glasse being full of this Liquor you may condense the aire into water in the heat of the summer, as also freeze water.

To make silver as white as snow.

Take of the calx of silver made by the dissolution of it in *aqua fortis*, dulcifie it, and boyl it in a Lixivium made of sope-athes, and it will be as white as any snow.

To make the silver tree of the Philosophers.

Take four ounces of *aqua fortis*; in which dissolve an ounce of fine silver, then take two ounces of *aqua fortis* in which is dissolved half an ounce of *argent vive*, mix these two Liquors together in a clear glasse with a pint of pure water, stop the glasse very close, and you shall see day after day a tree to grow by little and little, which is wonderfull pleasant to behold.

I Have set down severall vulgar preparations of gold and silver; and of almost all things else, I shall now crave leave to give an account of some philosophicall preparations of the Philosophers gold and silver. For indeed the Art of preparing of them is the true Alchymie, in comparison of which all the Chymicall discoveries are but abortives, and found out by accident, viz. by endeavouring after this, I would not have the world beleve that I pretend to the understanding of them, yet I would have them know that I am not incredulous as touching the possibility of that great philosophicall work which many have so much laboured after, and many have found. To me there is nothing in the world seems more possible, and whosoever shall without prejudice read over the Book entituled the New Light of Alchymie, shall almost whether he will or no (unlesse he resolves not to beleve any thing though never so credible) be convinced of the possibility of it. What unworthinesse God saw in gold more then in other things, that he should deny the seed of multiplication (which is the perfection of the creatures) to it, and give it to all things besides, seems to me to be a question as hard to be resolved, yea, and harder then the finding out the Elixir it self, in the discovering of which the grea-

the difficulty is, not to be convinced of the easiness thereof. If the preparations were difficult many more would find it cut then do (saith *Sandivogin*) for they cast themselves upon most difficult operations and are very subtle in difficult discoveries which the Philosophers never dreamed of. Nay saith the aforesaid author, if *Hermes* himself were now living, together with the subtlespitted *Glen*, and most profound *Hamund Lillie*, they would be accounted by our Chymists not for Philosophers, but rather for learners. They were ignorant of those so many distillations, so many circulations, so many calcinations, and so many other innumerable operations of Artists now a dayes used, which indeed men of this age did find out and invèced out of their books. Yet there is one thing wanting to us which they did, viz. to know how to make the philosophers stone, or physical tincture, the processes of which according to some philoiothers are these.



The processe of the Elixir according to Paracelsus.

TAKE the minerrall *Electrum* being immature, and made very subtle, put it into its owne spheare, that the impurities, and superfluities may be washed away, then purge it as much as possibly you can with *Stribum* after the Alchymisticall way, lest by its impurity thou suffer prejudice. Then resolve it in the stomach of an Estridge, which is brought forth in the earth, and through the sharpnesse of the Eagle is confortated in its vertue.

Now when the *Electrum* is consumed, and hath after its solution received the colour of a Mary-gold, doe not forget to reduce it into a spirituall transparent essence, which is like to true Amber, then adde halfe so much, as the *Electrum* did weigh before its preparation, of the extended Eagle, and oftentimes abstract from it the

the stomach of the Estridge, and by this meanes the *Electrum* will be made more spirituall. Now when the stomach of the Estridge is wearied with labour, it will be necessary to refresh it and alwayes to abstract it. Lastly, when it hath again lost its sharpnesse adde the tartarized quintessence, yet so that it be spoyled of its redness the height of foure fingers, and that passe over with it. This doe so often till it be of it selfe white, and when it is enough, and thou seest that signe, sublime it. So will the *Electrum* be converted into the whiteness of an exalted Eagle, and with a little more labour be transmuted into deep rednesse, and then it is fit for medicine.

The procelse of the Elixir according to Divi Lefchi
Genus Amo.

TAKE of our earth through cleaven degrees, cleaven graines, of our gold, and not of the vulgar, one graine, of our lune, not of the vulgar, graines two; but be thou admonished that thou take not the gold, and silver of the vulgar, for they are dead, but take ours which are living, then put them into our fire, and there will thence be made a dry Liquor: First the earth will be resolved into water, which is called the Mercury of Philosophers, and in that water it will resolve the bodies of the Sunne, and Moone, and consume them that there remaine but the tenth part, with one part, and this will be the *Humidum Radicale Metallicum*. Then take the water of the salt Nitre of our earth, in which there is a living streame if thou diggest the pit knee deep, take therefore the water of it, but take it clear, and set over it that *Humidum Radicale*, and put it over the fire of putrefaction and generation, but not such

as was that in the first operation. Gouverne all things with a great deale of discretion, untill there appeare colours like to the taile of a Peacock, govern it by digesting of it, and be not weary, till these colours cease, and there appeare throughout the whole, a green colour, and so of the rest, and when thou shalt see in the bottome, ashes of a fiery colour, and the water almost red, open the vessell, dip in a feather, and smeere over some iron with it, if it tinge, have in readiness that water which is the menstruum of the world (out of the spheare of the Moone so often rectified, untill it can calcine gold) put in so much of that water as was the cold aire, which went in, boyl it again with the former fire untill it tinge again.

The processe of the Philosophers stone according to Pontanus.

TAke the matter, and grinde it with a physicall contrition, as diligently as may be, then set it upon the fire, and let the proportion of fire be known, *viz.* that it only stirre up the matter, and in a short time, that fire without any other laying on of hands, will accomplish the whole work, because it will putrefie, corrupt, generate, and perfect, and make to appeare the three principall colours, black, white, and red: And by the meanes of our fire, the medicine will be multiplied, if it be joyned with the crude matter, not only in quantity but also in vertue. Withall they might therefore search out this fire (which is minerall, equall, continuall, vapours not away, except it be too much stirred up; partakes of sulphur, is taken from elsewhere then from the matter; pulleth downe all things, dissolveth, congealeth, and calcines, and is artificiall to find out, and that by a compendious, and neer way, without any cost, at least

least very small, is not transmuted with the matter, because it is not of the matter) and thou shalt attaine thy wish, because it doth the whole work, and is the key of the Philosophers, which they never revealed.

The Smaragdine table of Hermes from whence all Alchymie did arise.

TRue, without all falsity; certaine, and most true. That which is inferiour is as that which is superiour; and that which is superiour is as that which is inferiour, for the accomplishing of the miracles of one thing. And as all things were from one, by the mediation of one, so all things have proceeded from this one thing by adaptation. The Father therefore is the Sun, and the Mother thereof the Moon; the wind carried it in its belly; The Nurse thereof is the earth.

The father of all the perfection of the whole world is this: The vertue thereof is entire, if it be turned into earth. Thou shalt separate the earth from the fire, the subtile from the thick, sweetly, with a great deale of judgement. It ascends from the earth up to heaven, and againe descends down to the earth, and receives the powers of superiours, and inferiours. So thou hast the glory of the whole world: Therefore let all obscurity fly from thee. This is the strong fortitude of the whole fortitude, because it shall overcome every thing that is subtile, and penetrate every solid thing, as the world is created: Hence shall wonderfull adaptations be, whereof this is the manner, wherefore I am called *Hermes Trismegistus*, having three parts of the philosophy of the whole world. It is compleat, what I have spoken of the operation of the Sun.

F I N I S.

Book 1. The first part of the book is a general
description of the world, and the second part
is a description of the human mind, and the third
part is a description of the human body.

What is the nature of the world? It is a
vast and beautiful place, full of life and
activity.

The world is a vast and beautiful place, full of
life and activity. It is a place where
everything is connected, and where
everything is in motion. The world is a
place where we can find everything we
need, and where we can find everything
we want.

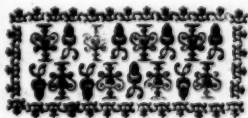
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we can find everything we need, and
where we can find everything we want.

THE
London-Distiller,

Exactly and truly shewing the way (in
words at length and not in myste-
rious CHARACTERS and
FIGURES) to draw all SORTS

OF
SPIRITS
AND
STRONG-WATERS:

To which is added their Vertues, with
Additions of many Excellent WATERS.



LONDON, Printed by E. Cotes, for Thomas Williams,
at the Sign of the Bible in Little-Britain, 1652.

LONDON DISTILLERS

Exactly and truly the same as the way (in)
words at length and in my life
and

S P L I T S

AND

STONING WATER

to which is added their Vices, with
Added in of many Excellent WATERS.



LONDON DISTILLERS
at the Sign of the ...



THE
DISTILLER
OF
LONDON:
OR,

Rules and Directions for extracting
and drawing of *Low-Wines* and *Spirits*,
to be redistilled into *Rich-Spirits*,
Strong-Waters, or *Aqua-vita*.



Hereas some of the Professours of Distillation, in and about *London*, have heretofore usually drawn Strong waters, and *Aqua vite*, &c. out of Wines, Low wines, and Small Spirits, &c. by one alone immediate extraction, operation, or distillation, (contrary to the most approved form of working in this our Art) and have been so opinionated of their own hereditary erroneous wayes, that they have esteemed the manner and order here taught, to be altogether unnecessary and improvident, in that there is here required *Redistillation*, which they have ever thought to be superfluous: Not considering, that what they save by their seeming thrift, they lose double in the excellency of their Wares, and otherwise. Wherefore that such may not onely acquit themselves of an aspersiion of ignorance (not undeservedly cast upon them) but also vindicate both their own, & the

The Distiller of London.

Companies reputation, for time to come: The directions following are henceforth by them and every Member of the Company, and their Successours, duly and exactly to be observed and practised from time to time for ever hereafter.

That all Wines, Lees of Wines, Low Wines, and Spirits, under proof whatsoever (intended for making of rich or high Spirits, Strong Waters, or *Aqua vite*, &c.) be first distilled, extracted, or drawn into strong Proof-Spirit, whereby they may be corrected and cured of their natural, harsh, distasteful, unsavory, or evil qualities, before they be compounded with ingredients, or extracted and drawn into rich or high Spirits, Strong waters, or *Aqua vite*; according to Art, and as is required in the ensuing Rules.

And because many grosse absurdities have been frequently practised in adulterating some, and abusing others, of the materials used in Distillation, and otherwise by Distillers, by such as only respect their own particular gain: regarding neither the profit or credit of Distillers that have been necessitated to make use of such their ill-conditioned Wares: Wherefore that these grievances may be removed for time to come, the Directions following are strictly to be observed and practised by all the Members of this Company and their Successors, from time to time for ever.

That no Afterworts or Wash (made by Brewers, &c.) called *Blew John*, nor musty, unsavory, or unwholesome Tilts, or Dregs of Beer or Ale; nor unwholesome or adulterated Wines, or Lees of Wines; nor unwholesome Sugar waters; musty, unsavory, or unwholesome returned Beer or Ale; nor rotten, corrupt, or unsavory Fruits, Drugs, Spices, Herbs, Seeds, nor any other ill-conditioned materials of what kind soever, shall henceforth be distilled, extracted, or drawn into Small Spirits, or Low Wines, or be any other wayes used, directly or indirectly, by any the Members of this Company, or their Successors, at any time hereafter for ever.

And whereas of late times the Small Spirits or Low Wines, made and sold, as well in and about London, as elsewhere in this Commonwealth, have been generally complained of, for their mean, weak, and poor condition; whereby many inconveni-

ences.

ences have fallen upon most of the *Distillers* in general; And that not through the alone practices of such, as have no just title to, or interest in this incorporation; but even by some of the *Distillers* themselves, who (notwithstanding their pretences of being necessitated thereunto) have justly deserved reproof, for yielding to be Actors in a thing of such ill consequence to *Distillers* in general. Wherefore, that those abuses and disorders may now be taken away, and the like prevented for time to come, the ensuing Rule is duly to be observed and practised.

That no Small spirits, or Low wines, shall henceforth be distilled, extracted, or made, and be allowed to be sold, put to sale, or used by any of the Members of the Company, or their Successors: but such onely, as out of which, by one alone redistillation, extraction, or operation, may be produced in quantity, at least one third part thereof, of good Strong Proof-spirit, such as is required in the Rules ensuing, for making rich, or high Spirits, Strong waters, or *Aquavite*, &c. under such pains, penalties, and punishments, as by the Laws of the Commonwealth, Ordinances, or Orders of the Company, or otherwise, may be imposed or inflicted on the contemners, neglecters, or opposers of these Directions.



Rules and Directions for
THE
COMPANY
OF
DISTILLERS
OF
LONDON, in general.

But more especially for such of them,
as now do, or hereafter shall make,
VINEGARS, &c.



Hereas upon due examination it hath plainly appeared, That many insufferable inconveniences have of late fallen upon this Company, and their Trade, in general; by reason of the disorderly and abusive expence and employment of Brewers After-worts (called Wash;) Inſomuch, that thereby not onely those of this Company that have had no hand herein, but even the Distillers themselves that have been the Delinquents, have intolerably suffered both in their Reputation and great decay of their Trades, by these their alone inconsiderate practises. For Reformation of the present disorders and abuses, and future prevention of the like, these ensuing Admonitions and directions are strictly to be observed and practised, viz.

That

The Distiller of London.

That no Member or Members of this Company; or their Successors, nor any of them, at any time hereafter, for ever, by any way or means whatsoever (directly or indirectly) shall or may, use, dispose, convert or imploy, any After-words (or Wash, made by the Brewers or others) into Vinegar, Bear-eager, or Ale-eager, or either of them; or to or for any other use or employment whatsoever, except onely to distill the same into Low wines or Spirits, to be redistilled into Proof-spirit for the uses aforesaid, according to the true intent and meaning of these Directions, as they and every of them respect their Oaths by them taken (when they were made free, and received into this Incorporation :) And will undergo the penalties provided, or to be provided, by the Ordinances of this Company, or otherwise, to be imposed or inflicted on the Contemners, Neglecters, or Opposers hereof.

Rule 1.

PROvide three sweet Tuns (or smaller Casks) place them orderly on Scantlings; provide good sound white Rape, and such well conditioned liquid Materials as are proper for this use, what suffeeth (not musty in any case.) Then number your Tuns, 1, 2, 3. Fill Tun 1, with Rape within six inches of the Bungue stop the Bungue with Cork or Wood very close, and let it stand, and in few days it will gather heat, then being conveniently hot, fill up the vessell within three inches of top full, with your liquid Materials without Drags; stop it close again: And at that instant, in like manner as before, fill Tun 2, with Rape, after a few dayes, that will be hot as the former was, then finding it conveniently hot, draw off Tun 1, and put it into Tun 2, and stop both close: At the present fill Tun 3, with Rape, and order it in every respect, as you did the former. And when Tuns, 1 and 3, have gathered heat sufficiently fill up Tun 1, with fresh Liquor (as at first) and draw off Tun 2, and put it into Tun 3, and so let Tun 2, gather sufficient heat again; Then draw off Tun 1, and put it into Tun 2. And at that present

present, you may draw off Tun 3, and put it into a store Cask; for having passed three times through the Rape, it is thereby become to be good merchantable Ware.

And so in like order, supply one Vessel from another, till you have finished your work according to Art.

When all your liquid Materials are spent, so that you have no more to continue your work, then be sure your Tuns stand neerer, till you are provided of more Liquor, to put upon your Rape; for if your Rape (standing dry) should wax hot, you having nothing proper to supply the same, your Rape will soon decay, and be utterly spoiled.

In Summer or warm weather, the Rape will gather sufficient heat in two or three days; but in Winter it will require more time.

Rule II.

TAKE 20 Quarters of good sound Mault, convert it into 160 Barrells of good serviceable Ware (at the most) you must allow to this quantity, good sweet Hops at least 36 pound. And being well wrought according to Art, put it into sweet Cask (Sweet Oyl Buts are best) fill them within 8 inches of the Bungies (being laid upon Scantlings in the Sun) let not the Head work over at the Bungies, and it will sink to the bottom. Prepare little covers of wood fit to cover the Bungies, and larger covers to lay over them, to defend it from Rain falling into the Cask. Let the Bungies stand open only, when the Sun shines hot upon the Cask; but in close or wet weather and nights, let both covers be alwayes kept on.

When the first Head of the Liquor is falln, then draw it from the Lee, into another clean sweet Cask; and so afterward from Cask to Cask, as there shall be cause, till it come to perfection: Then draw it off into another sound Cask, and so house it for use.

The largest Cask are the fittest to house, and keep Wares in for store.

If your Wares grow long and ropy, then put a fit quantity of Allum into it, work it well together according to Art, and it will grow short again.



THE
DISTILLER
OF
LONDON:
OR,

Rules and Directions for Preparing,
Composing, Distilling, Extracting, and
making of rich Spirits, Strong-Waters,
Aqua Vitæ, &c.

CHAP. I.

of Aqua vitæ; the first sort,

The greater quantity.

TAke strong Proof spirit 10 Gallons, Aniseeds bruised 1 pound, Distil them into strong Proof Spirit according to Art.

The lesser quantity.

Take strong Proof spirit 1 gallon, Aniseeds bruised 1 ounce 4 drams, distil them into strong Proof spirit according to Art.

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CHAP. II.

Aqua vitæ, the second sort.

The greater quantity.

Take strong Proof spirit what sufficeth, Aniseeds 2 pound,
Caraway seeds }
Coriander seeds } ana 4 ounces.
Distil them into strong Proof spirit according to Art.

The lesser quantity.

Take strong Proof spirit 1 gallon, Aniseeds 3 ounces and a
quarter, Caraway seeds }
Coriander seeds } three drams.
distil them into strong Proof spirit according to Art.

CHAP. III.

Of Aniseed Water.

The greater quantity.

Take strong Proof spirit 10 gallons, Aniseeds the best bruised five pound, distil them into strong Proof spirit; dulcifie it according to Art with five pound of white Sugar.

The lesser quantity.

Take strong Proof spirit what sufficeth, Aniseeds the best bruised 8 ounces, distil them into strong Proof spirit, dulcifie it according to Art with 8 ounces of white Sugar.

Aniseed water strengtheneth the Stomach, breaketh flagn, and helpeth digestion.

It is also excellent against the Tisick, and shortness of breath, and against wind in the Stomach and Body.

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CHAP. IV.

Of Angelica Water.

The greater quantity.

Take strong Proof spirit what sufficeth; Angelica roots a pound and a half or Angelica hearb green 7 pound and a half, Aniseeds 16 ounces, slice the roots thin, or bruise them & the seeds, distil them into strong Proof spirit; dulcife with 5 pound of white Sugar.

The lesser quantity.

Take strong Proof spirit 8 pound, Angelica roots 2 ounces and a quarter; or Angelica hearb green 12 ounces, Aniseeds 1 ounce 5 drams, Slice the roots thin, or bruise them and the seeds, distill them into strong Proof spirit, dulcife with 8 ounces of Sugar.

Angelica water is very cordiall, strengtheneth the Stomach and inward parts: and is a good Preservative against the plague and other infections.

CHAP. V.

Of Wormwood Water.

The greater quantity.

Take strong Proof spirit 10 gallons, Aniseeds bruised one pound, Wormwood common, leaves and seeds, stript, and dry 2 pound, distil them into strong Proof spirit according to Art; dulcife with white Sugar 5 pound.

The lesser quantity.

Take strong Proof spirit what sufficeth, Aniseeds
E c 2
bruised

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bruised 1 ounce and 5 drams, Wormwood common, leaves and seeds stript, and dry 3 ounces and an half, distil them into strong Proof spirit according to Art, dulcifie with white Sugar half a pound.

Wormwood water consumeth and breaketh Windes, killeth Worms, bindereth Vomiting, provoketh appetite, and strengtheneth the stomach.

It is also a great Cordiall, and is very good against pains of the head proceeding of a cold cause.

CHAP. VI.

*Of Balm Water.**The greater quantity.*

Take strong Proof spirit what sufficeth, Hearb balm dry 3 pound, Aniseeds 1 pound; distil them into strong Proof spirit according to Art; dulcifie with white sugar what sufficeth.

The lesser quantity.

Take strong Proof spirit 8 pound Hearb, balm dry 4 ounces and an half, Aniseeds 1 ounce 5 drams, distil them into strong Proof spirit according to Art, dulcifie with white Sugar eight ounces.

Balm water is good against the infirmities of the Mother, and is very comfortable for women in the time of their pains to take a little of it, for the sooner and safer provoking of a speedy delivery.

It is also a Cordiall and strengtheneth the heart.

CHAP. VII.

*Of Mint Water.**The greater quantity.*

Take strong Proof spirit 10 gallons, Spear Mint dry 3 pound,

Ani-

Aniseeds best 1 pound, distil them into strong Proof spirit; dulcifie with white Sugar 5 pound.

The lesser quantity.

Take strong Proof spirit what sufficeth, Spear Mint dry 4 ounces and 3 quarters, Aniseed 1 ounce and 5 drams, distil them into strong Proof spirit, dulcifie with white sugar what sufficeth.

Mint water comforteth and strengtheneth the Stomach, Heart, Liver, and Spleen, helpeth concoction and is good against vomiting.

CHAP. VIII.

Of Rosemary Water.

The greater quantity.

Take strong Proof spirit what sufficeth, Rosemary stript and dry 30 ounces, Aniseeds of the best 16 ounces, distil them in to strong Proof spirit, dulcifie with white Sugar what sufficeth.

The lesser quantity.

Take strong Proof spirit 8 pound, Rosemary stript and dry 3 ounces, Aniseeds of the best 1 ounce 5 drams, distil them in to strong Proof spirit, dulcifie with white Sugar 8 ounces.

Rosemary water is very good against Dysentery or Bloudy Flux, proceeding of a cold cause, either drunk or three spoonfuls thereof administered in a convenient Glister.

It also preserveth from vomiting, strengtheneth the Stomach, quickeneth the Sight, and comforteth the Brain.

CHAP. IX.

Of Limon, or Orange Water.

The greater quantity.

Take strong Proof spirit what sufficeth, Limon or Orange
pils dry 30 ounces, Aniseeds of the best 16 ounces, bruise the
pils and seeds, distil them into strong Proof spirit according to
Art, dulcifie with white Sugar 5 pound.

The lesser quantity.

Take strong Proof spirit 1 gallon, Limon or Orange pils dry
3 ounces, Aniseeds of the best 1 ounce 5 drams, bruise the pils
and seeds, distil them into strong Proof spirit according to Art,
dulcifie with white Sugar 8 ounces.

*Limon water strengtheneth and reviveth the feeble Spirits aromati-
zeth the Stomach, and is a great Cordiall.*

● *It also openeth obstructions, exceedingly breaketh wind in the Stomach,
is as an healing Balsam to all the inward parts, and is a great Restorative
to mans Nature.*

CHAP. X.

Of Stomach Water the lesse.

The greater quantity.

Take strong Proof spirit what sufficeth, Spear Mint,
dry, Lovage roots dry, Aniseeds of each 1 pound, Calamus A-
romaticus, Ginger, Sweet Fennell seeds, Imperatoria roots,
Wormwood dry and stript, of each 8 ounces,

Carraway } seeds, of each 8 ounces.

Coriander }

Cummin seeds }

Cloves } of each three ounces,

Bruise

Bruise them that are to be bruised; distil them into strong Proof spirit according to Art; dulcife with white sugar 5 pound.

The lesser quantity.

Take strong Proof spirit 8 pound, Spear Mints dry, Lovage roots dry, Aniseeds; of each 1 ounce 5 drams; Calamus Aromaticus, Ginger, Sweet Fennell seeds, Imperatoria roots, Wormwood dry and stript, of each 7 drams,

Caraway } seeds of each 5 drams,
Coriander }

Cummin seeds }
Cloves } of each 2 drams and an half,

Bruise them that are to be bruised, distil them into strong Proof spirit according to Art, dulcife with white Sugar 8 ounces.

CHAP. XI.

Stomach Water the greater.

The greater quantity.

Take strong Proof spirit 10 gallons, Calamus Aromaticus 6 ounces, Guaiacum green Bark, Avens Roots dry, Galingale of each 4 ounces, Citron pills dry, Orange pills dry, White Cinnamon of each 3 ounces; Wormwood Common dry, Wormwood Roman dry, Spear Mint, Rosemary tops, Costmary, Sweet Marjoram, Wild Thyme, all dry of each 2 ounces.

Nutmegs } of each 2 ounces and an half.
Cinnamon }

Cubebs } of each 1 ounce and an half.
Cardamoms }

Sweet Fennell seeds, Coriander seeds, of each 5 ounces; Aniseeds a pound and half; bruise them all that are to be bruised; Distil them into strong Proof spirit, Dulcife with white Sugar ten pound according to Art.

The

The lesser quantity.

Take strong Proofspirit what sufficeth, Calamus Aromaticus 5 drams, Gualacum, green Bark, Avens roots dry, Galin-
gale of each 4 ounces, Citron pills dry, Orange pills dry, White
Cinamon of each 3 drams and a quarter, Wormwood Com-
mon dry, Wormwood Roman dry, Spear Mint, Rosemary tops,
Costmary, Sweet Marjoram, Wild Thyme, all dry, of each a
dram and half, Nutmegs

Cinamon } of each 2 drams,

Cubebs

Cardamums } of each a dram and a quarter,

sweet Fennell seeds, Goriander seeds, of each half an ounce, Aniseeds 2 ounces 3 drams, Bruise then all that are to be bruised, distil them into strong Proof spirit, Dulcifie with white Sugar 16 ounces, according to Art.

CHAP. XII.

*Marjoram Water.**The greater quantity.*

Take strong Proof spirit what sufficeth, Sweet Marjoram dry 3 pound, Aniseeds 16 ounces, Caraway 4 ounces, Calamus Aromaticus 6 ounces, bruise them, distil and dulcifie with white Sugar what sufficeth according to Art.

The lesser quantity.

Take strong Proof spirit 1 gallon, Sweet Marjoram dry 5 ounces, Aniseeds 1 ounce 5 drams, Caraway 3 drams and a quarter, Calamus Aromaticus 5 drams, bruise them, distil and dulcifie with white Sugar 8 ounces according to Art.

Marjoram water is good against the infirmities of the Liver and Spleen, causeth freeness of breathing, and strengtheneth the Stomach and inward parts.

CHAP. XIII.

Uisqueback.

The greater quantity.

Take strong Proof spirit 10 gallons, Aniseeds 1 pound, Cloves 2 ounces, Nutmeg, Ginger, Caraway seeds of each four ounces: distil them into strong proof Spirit according to Art. Then adde to the distilled water Licorice Spanish, Raisins solis of each 2 pound, bruise the Licorice and Raisins; dulcifie with brown Sugar 5 pound, stir them well together, and so let it stand ten dayes, and then (being fine) draw it off and keep it for use.

The lesser quantity.

Take strong Proof spirit what sufficeth, Aniseeds 1 ounce 5 drams, Gloves a dram and half, Nutmeg, Ginger, Caraway seeds of each 3 drams, distil them into strong Proof spirit according to Art; then adde to the distilled water Licorice Spanish, Raisins solis, of each 3 ounces a dram and half, bruise the Licorice and Raisins, dulcifie with brown Sugar 8 ounces, stir them well together, and so let it stand ten dayes, and then (being fine) draw it off and keep it for use.

Uisqueback cureth the infirmities of the lungs, warmeth the Stomach, and causeth expectoration.

CHAP. XIV.

Balsamint Water.

The greater quantity:

Take strong proof Spirit what sufficeth, Balsamins dry two pound, Aniseeds best 1 pound, Caraway seeds 4 ounce s, Lemon pills dry 8 ounces, bruise them that are to be bruised, distil them

them into Proof spirit, Dulcifie with white Sugar 5 pound according to Art.

The lesser quantity.

Take strong Proof spirit 1 gallon, Balsamint dry 3 ounces a dram and half, Aniseeds best one ounce 5 drams, Caraway seeds 3 drams, Limon pills dry 6 drams and an half, bruise them that are to be bruised, distil them into Proof spirit, dulcifie with white Sugar 8 ounces according to Art.

Balsamint water comforteth the Stomach and expelleth wind.

CHAP. XV.

Rosa solis.

The greater quantity.

Take strong Proof spirit 10 gallons, Cinamon of the best 8 ounces, Cloves 2 ounces, Nutmegs, Ginger, Caraway seeds, of each 4 ounces, Marigold flowers, Aniseeds, of each 16 ounces, bruise them, distil them into strong Proof spirit according to Art; then adde to the distilled water Licorice Spanish 1 pound, Raisins solis, Brown Sugar, of each 5 pound, Red Sanders four ounces, bruise the Licorice and Raisins, stir them well together, and let them stand 12 dayes, then being clear it may be drawn for use.

The lesser quantity.

Take strong Proof spirit what sufficeth, Cinamon of the best 6 drams and an half, Cloves a dram and half, Nutmegs, Ginger, Caraway seeds of each 3 drams, Marigold flowers, Aniseeds, of each 1 ounce and 5 drams, bruise them, distil them into strong Proof spirit according to Art, then adde to the distilled water Licorice Spanish an ounce 5 drams, Raisins solis, Brown Sugar, of each 8 ounces, Red Sanders 3 drams, bruise the Licorice and Raisins, stir them well together, and let them stand

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stand twelve dayes, then being clear it may be drawne for use.

This Rosafolis is good against cold infirmities of the Stomach, helpeth digestion and expelleth wind.

CHAP. XVI.

Clove Water.

The greater quantity.

Take strong Proof spirit what sufficeth, Cloves of the best 10 ounces, Aniseeds 16 ounces, distil them into strong Proof spirit, dulcifie with white Sugar 5 pound.

The lesser quantity.

Take strong Proof spirit 1 gallon, Cloves of the best 1 ounce Aniseeds 1 ounce and 5 drams, distil them into strong Proof spirit, dulcifie with white Sugar 8 ounces.

Clove water helpeth digestion, breaketh wind, provoketh Urine, comforteth the Heart, and strengtbeneth the Stomach, Liver and all the inward parts.

CHAP. XVII.

Cinamon Water Common.

The greater quantity.

Take strong Proof spirit 10 gallons, Cinamon of the best 3 pound, Aniseeds 10 ounces, distil them into Proof spirit according to Art, dulcifie with white Sugar 7 pound and a half.

The lesser quantity.

Take strong Proof spirit what sufficeth, Cinamon of the best 3 ounces

8 ounces, Aniseeds 1 ounce, distil them into Proof spirit according to Art, dulcifie with white Sugar 12 ounces.

CHAP. XVIII.

Cinamon water Proper.

The greater quantity.

Take strong Proof spirit what sufficeth, Cinamon best large ten pounds, distil them into Proof spirit according to Art, take white Sugar 12 pound and an half, Rose water four pound, make them into a Syrup, and dulcifie therewith according to Art.

The lesser quantity.

Take strong Proof spirit 1 gallon, Cinamon best large 16 ounces, distil them into Proof spirit according to Art, take white Sugar 20 ounces, Rose water 6 ounces 3 drams, make them into Syrup, and dulcifie therewith according Art.

Cinamon water is good against loathing of the Stomach, and a sinking breath.

It also strengtheneth the Heart, Liver, Lungs, and Spleen, and comforteth the Brain and Sinews.

CHAP. XIX.

Sweet Fennell seed Water.

The greater quantity.

Take strong Proof spirit 10 gallons, sweet Fennell seeds five pound, Caraway seeds 4 ounces, Aniseeds 16 ounces, distil them into Proof spirit, dulcifie with white Sugar 5 pound.

fixed oil of cinnamon
2000000

[The

The lesser quantity.

Take strong Proof spirit what sufficeth, Sweet Fennell seeds 8 ounces, Caraway seeds 3 drams, Aniseeds an ounce and five drams, distil them into Proof spirit, dulcifie with white Sugar 8 ounces.

Fennell water is good against the nauseousnesse of the Stomach, and easeth the pain thereof, digesteth Flegm and expelleth Wind.

CHAP. XX.

Marigold Water.

The greater quantity.

Take strong Proof spirit what sufficeth, Marigold flowers new gathered, pickt clean, 2 pecks heaped, bruise them, Sweet Fennell seeds, Aniseeds, of each 10 ounces, distil them into strong Proof spirit, dulcifie with white Sugar five pound.

The lesser quantity.

Take strong Proof spirit 1 gallon, Marigold flowers new gathered, pickt clean, what sufficeth, bruise them, Sweet Fennell seeds, Aniseeds of each 1 ounce, distil them into strong Proof spirit, dulcifie with white Sugar 8 ounces.

Marigold water comforteth the inward parts, and is good against infection.

CHAP. XXI.

Caraway Water.

The greater quantity.

Take strong Proof spirit 10 gallons, Caraway seeds 30
F f 3 ounces

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ounces, Aniseeds 10 ounces, Rosemary dry 4 ounces, Limon pills dry, Cloves of each 3 ounces, distil them into Proof spirit according to Art, dulcifie with white Sugar five pound.

The lesser quantity.

Take strong Proof spirit what sufficeth, Caraway seeds three ounces, Aniseeds 1 ounce, Rosemary dry 3 drams, Limon pills dry, Cloves of each 2 drams and an half, distil them into Proof spirit according to Art, dulcifie with white Sugar 8 ounces.

Caraway water is profitable against the cold grief of the Stomach, and Bowels, comforteth them and breaketh wind.

CHAP. XXII.

*Nutmeg Water.**The greater quantity.*

Take strong Proof spirit what sufficeth, Nutmeg 20 ounces, Aniseeds 10 ounces, bruise them, distil them into Proof spirit according to Art, dulcifie with white Sugar 5 pound.

The lesser quantity.

Take strong Proof spirit 1 gallon, Nutmegs best 2 ounces, Aniseeds 1 ounce; bruise them, distil them into Proof spirit according to Art, dulcifie with white Sugar 8 ounces.

Nutmeg water comforteth the Spirits, dissolveth wind, Aromatizeth the Stomach, causeth a sweet breath, and provoketh Urine.

CHAP. XXIII.

Precious Water.

The greater quantity.

Take strong Proof spirit ten gallons,

Enula Campana

Avens

Angelica

Cyprus

Calamus Aromaticus

Sassafras

} Roots of each 5 ounces.

Zedoary, Galingale, of each 4 ounces, Cassia lignea, Lignum

Rhodium, Yellow Sander of each 3 ounces,

Citron

Orange

} pils dry, of each 6 ounces,

Cinamon White, Nutmegs, Maces, Ginger, of each 5 oun. Cina-

mon best 20 ounces, Cloves, Cardamums, Cubebs, of each 2 oun-

ces, and an half, Sweet Chervile seeds, Basil seeds, of each 3 ounces

and an half, Coriander seeds, Sweet Fennell seeds of each ten

ounces, Aniseeds 20 ounces, bruise them, distil them into Proof

spirit, and dulcifie with fine Sugar 15 pound according to Art;

Let it stand till it be fine, then draw it off, and adde Musk one

dram : Ambergreese 4 drams; then let it clear and draw it for

use.

The lesser quantity.

Take strong Proof spirit what sufficeth,

Enula Campana

Avens

Angelica

Cyprus

Calamus Aromaticus

Sassafras

} Roots, of each half an ounce.

Zedoary, Galingale, of each 3 drams, Cassia lignea, Lignum

Rho-

Rhodum, Yellow Sanders, of each 2 drams and an half,
 Citron }
 Orange } pils dry of each 4 drams and 3 quarters;
 Cinamons White, Nutmegs, Maces, Ginger, of each half an
 ounce, Cinamon best 2 ounces, Cloves, Cardamums, Cubebs
 of each 2 drams, Sweet Chervile seeds, Basil seeds of each three
 drams, Coriander seeds, Sweet Fennell seeds, of each 1 ounce,
 Aniseeds 2 ounces, bruise them, distil them into Proof spirit,
 and dulcifie with fine Sugar 24 ounces according to Art, let it
 stand till it be fine; then draw it off and adde Musk 6 grains, Am-
 bergreece 24 grains; then let it clear and draw it for use.

*Pretious water is good against the Plague and Malignant fevers :
 It also comforteth the Spirit, strengtheneth the Heart preserveth the Senses,
 and relieveth languishing Nature.*

CHAP. XXIV.

Wind Water.

The greater quantity.

Take strong Proof spirit what sufficeth, Enula Campana
 roots dry, Aniseeds of each 1 pound, Cyprus roots, Bark of the
 roots of Bay tree, or as much leaves, Sassafras with the Bark,
 Cinamon white, of each 6 ounces, Calamus Aromaticus, Orange
 pils, dry of each 4 ounces, Clary, Red Mints, Calamint, El-
 der flowers, Camomile flowers, of each 5 ounces, Sweet Fennel
 seeds, Caraway seeds, Angelica seeds of each 3 ounces and an
 half, Coriander seeds, Cardamums, Cubebs, Grains of Para-
 dise, Cloves, Ginger of each 2 ounces and a half, Pepper long
 and white of each 10 drams, bruise them all grossely, distil
 them into strong Proof spirit according to Art, dulcifie with
 white Sugar 10 pound, draw it for use when it is perfectly
 clear.

The lesser quantity.

Take strong Proof spirit 1 gallon, Enula Campana roots
 dry

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dry, Aniseeds, of each 1 ounce 5 drams, Cyprus roots, Bark of the root of Bay tree, or as much leaves, Sassafras with the Bark, Cinamon white, of each 4 drams and 3 quarters, Calamus Aromaticus, Orange pills dry, of each 3 drams, Clary, Red Mints, Calamint, Elder flowers, Camomile flowers, of each half an ounce, Sweet Fennell seeds, Caraway seeds, Angelica seeds, of each 3 drams, Coriander seeds, Cardamums, Cubebs, Grains of Paradise, Cloves, Ginger, of each 2 drams, Pepper long and white, of each 1 dram, bruise them all grossely, distil them into strong Proof spirit according to Art, dulcifie with white Sugar 16 ounces, draw it for use when it is perfectly clear.

CHAP. XXV.

Water to procure Sweat.

The greater quantity.

Take strong Proof spirit 10 gallons, Butter-bur-roots dry, a pound, Valerian, (common) Roots, Aniseeds, of each one pound, Vincetoxicum roots, Sassafras roots, with the Bark of each 8 ounces, Angelica hearb dry, Carduus Benedictus, Great Valerian Hearb and Roots, all dry; Scordium, of each twelve ounces, Cowslip
Marigold } flowers, of each 10 ounces.

Juniper Berries 20 ounces, bruise them all, distil them into Proof spirit according to Art; dulcifie with white Sugar ten pound.

The lesser quantity.

Take strong Proof spirit what sufficeth, Butter-bur-roots dry, 3 ounces a dram and half, Valerian (common) Roots, Aniseeds, of each 1 ounce 5 drams, Vincetoxicum roots, Sassafras roots with the Bark, of each 6 drams and a half; Angelica Hearb dry, Carduus Benedictus, Great Valerian Hearb and Roots, all dry, Scordium of each, one ounce a dram and halfe,

G g

Cowslip,

Cowslip } flowers, of each 1 ounce,
 Marigold }
 Juniper Berries 2 ounces, bruise them all, distil them into
 Proof spirit according to Art; dulcifie with white Sugar 16
 ounces.

CHAP. XXVI.

*Surfeit Water.**The greater quantity.*

Take strong Proof spirit what sufficeth, Juniper berries two pound, Enula Campana Roots dry 1 pound, Calamus Aromaticus, Galingale, of each 4 ounces, Wormwood, Spear Mint, Red Mint, all dry, of each 2 ounces and an half, Caraway seeds, Angelica seeds, of each 2 ounces, Sassafras Roots with the Bark, White Cinamon, of each 3 ounces, Nutmegs, Mace, Cloves, Ginger, of each 1 ounce, Red Poppy flower 4 pound, Aniseeds 2 pound and an half, bruise them all, distil them into strong Proof spirit, dulcifie with white Sugar 10 pound.

The lesser quantity.

Take strong Proof spirit 1 gallon, Juniper berries 3 ounces a dram and half, Enula Campana Roots dry 1 ounce 5 drams, Calamus Aromaticus, Galingale, of each 3 drams, Wormwood, Spear Mint, Red Mint, all dry, of each 2 drams; Caraway seeds, Angelica seeds, of each a dram and a half, Sassafras Roots with the Bark, White Cinamon, of each 2 drams and a half, Nutmegs, Mace, Ginger, Cloves, of each 3 quarters of a dram, Red Poppy flower 6 ounces and a half, Aniseeds 4 ounces, bruise them all, distil them into strong Proof spirit, dulcifie with white Sugar 16 ounces.

CHAP. XXVII.

Scorbenticall Water.

The greater quantity.

Take strong Proof spirit 10 gallons, Horse Reddish roots dry 2 pound, Enula Campana roots dry, Aniseeds, of each 1 pound, Water

Winter } Cresses
Garden }

Taragon, Balsamint, Scurvigraffe (Garden) Wormwood, Brookelime, Trefoile (Water) Sweet Chervile, of each 6 ounces, Arsmart 8 ounces,

Mustard }
Bank-creffe } seed, of each 3 ounces.
Rocker }
Reddish }

Citron }
Orange } pile dry,

Cinamon White, Mace, of each 4 ounces: Bruise them all, distil them into strong Proof spirit according to Art, Dulcifie with white Sugar what sufficeth; for use take 7 parts of this Spirit, and 1 part of juice of Limons, (or more) mingle them together, and dulcifie with white Sugar what sufficeth.

The lesser quantity.

Take strong Proof spirit what sufficeth, Horse Reddish roots dry, 3 ounces a dram and half, Enula Campana roots dry, Aniseeds, of each 1 ounce 5 drams,

Water }
Winter } Cresses,
Garden }

Tarragon, Balsamint, Scurvygrasse (Garden) Wormwood, Brookelime, Trefoile (Water) Sweet Chervile, of each half an ounce and three quarters of a dram, Arsmart three

quarters of an ounce and half a dram,
 Mustard
 Bank-cresse } seeds, of each 2 drams and an half,
 Rocket
 Reddish
 Citron } pills dry,
 Orange }

Cinamon White, Mace, of each 3 drams and a quarter, bruise them all, distil them into strong Proof spirit, according to art, dulcifie with white Sugar 1 pound; for use take 7 parts of this spirit, and 1 part of juice of Limons (or more) mingle them together, and dulcifie with white Sugar what sufficeth.

CHAP. XXVIII.

Plague Water.

The greater quantity.

Take strong Proof spirit what sufficeth, Butter-bur-roots dry 1 pound, Garden } Valerian roots dry,
 Common }

Angelica roots, Imperatoria, Gentian, Enula Campana, Snake-grasse roots, of each 6 ounces, Contra Yerva, Zedoary, Galingale, of each 4 ounces, Rue leaves dry, White Horehound, Scordium, Carduus Benedictus, of each 5 ounces, Elder flowers, Lavender, Maces of each 3 ounces, Citron pills dry, Juniper berries, of each 8 ounces, Green Walnuts with the husks 1 pound, Venus Triacle, Mithridate, of each 2 ounces, Aniseeds best a pound and half, Camphire 1 ounce; distil them into strong Proof spirit according to Art, dulcifie with white Sugar 10 pound; For use, let the party infected take of this water 1 ounce, mingled with warm Posset drink (or any water proper in that case) and be kept very warm and sweat well thereon.

The

The lesser quantity.

Take strong Proof spirit 1 gallon, Butterbur roots dry 1 ounce and 5 drams, Garden } Valerian roots dry,
Common }

Angelica roots, Imperatoria, Gentian, Enula Campana, Snake-grasse roots, of each half an ounce and 3 quarters of a dram, Contra Yerva, Zedoary, Galingale, of each 3 drams and a quarter, Rue leaves dry, White Horehound, Scordium, Carduus Benedictus, of each half an ounce, Elder flowers, Lavender, Mace, of each 2 drams and a half, Citron pills dry, Juniper berries, of each 6 drams and a half, Green Walnuts with the husks 1 ounce 5 drams, Venus Triacle, Mithridate, of each a dram and half, Aniseeds best 2 ounces 3 drams and a half, Camphire 3 quarters of a dram, distil them into strong Proof spirit according to Art, dulcifie with white Sugar what sufficeth; For use, let the party infected take of this water 1 ounce mingled with warm posset drink (or any water proper in that case) and be kept very warm, and sweat well thereon.

CHAP. XXIX.

Lavender Water.

The greater quantity.

Take strong Proof spirit 10 gallons, Lavender leaves dry three pound, Lavender flowers dry 2 pound, Maces half a pound, or Nutmegs 1 pound, Lavender Cossen dry 2 pound, Stechados half a pound, bruise them that are to be bruised, distil them into Proof spirit according to Art, dulcifie with white Sugar what sufficeth.

The lesser quantity.

Take strong Proof spirit what sufficeth, Lavender leaves
G g 3 dry

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dry, 4 ounces 3 quarters and half a dram, Lavender flowers dry, 3 ounces a dram and half, Mace 6 drams and a half, Nutmeg one ounce, 5 drams, Lavender Cotten dry 3 ounces a dram and half, Stœchados 6 drams and a half, bruise them that are to be bruised, distil them into proof Spirit according to Art, dulcifie with white Sugar 16 ounces.

Lavender water helpeth the passions of the Heart, Palsies, Cramps, Apoplexies, and restoreth the speech lost.

C H A P. XXX.

*Sage Water.**The greater quantity.*

Take strong Proof spirit what sufficeth, Great Sage dry 3 pound, Red Sage dry 2 pound, Lavender flowers, Sage flowers, of each 1 pound, Lavender Cotten dry, Southernwood dry, of each 8 ounces, Nutmegs ten ounces; Bruise or beat them as is most proper, distil them into Proof spirit according to Art, dulcifie with white Sugar what sufficeth.

The lesser quantity.

Take strong Proof spirit 1 gallon, Great Sage dry 4 ounces 3 quarters and half a dram, Red Sage dry 3 ounces a dram and a half, Lavender flowers, Sage flowers, of each 1 ounce a half and 1 dram, Lavender Cotten dry, Southern wood dry, of each 6 drams and a half, Nutmegs what sufficeth; Bruise or beat them as is most proper, distil them into Proof spirit according to Art, dulcifie with white Sugar 16 ounces.

Sage water is good for such as are of a cold and flegmatick constitution, and for such as are heavy and dull of spirit.

CHAP. XXXI.

Ros solis Proper.

The greater quantity.

Take strong Proof spirit 10 gallons, Ros solis gathered in due season, and clean pickt, 4 pound, Juniper berries 3 pound; Sassafras rooted with the Bark, Caraway seeds, of each four ounces, Marigold flowers 1 pound, Aniseeds 1 pound and an half, Bruise them that are to be bruised, distil them into strong Proof spirit according to Art; Take hereof 7 pound, adde thereto 1 pound of water treated of in the 23 Chapter dulcified Licorice bruised one pound, dulcifie with white Sugar ten pound: If you adde none of the aforesaid water, then in stead thereof take Musk 1 dram, Ambergreece 3 drams, colour it with the tincture of July flower, or Roses what sufficeth according to Art.

The lesser quantity.

Take strong Proof spirit what sufficeth, Ros solis gathered in due season, and clean pickt, six ounces 3 drams and a quarter, Juniper berries 4 ounces 6 drams and a half, Sassafras roots with the Bark, Caraway seeds, of each 3 drams and a quarter, Marigold flowers 1 ounce a half and 1 dram, Aniseeds 2 ounces 3 drams and a half, Bruise them that are to be bruised, distil them into strong Proof spirit according to Art; Take hereof ten ounces 1 dram and a half, adde thereto 1 ounce 5 drams of water treated of in the 23 Chapter dulcified. Licorice bruised 1 ounce 5 drams, dulcifie with white sugar what sufficeth, If you add none of the aforesaid water, then in stead thereof take Musk six grains, Ambergreece 18 grains; colour it with the tincture of July flower, or Roses what sufficeth, according to Art.

Ros solis proper, openeth obstruction, relievetb decaying Nature, comforteth the Stomach, quickneth Appetite, and is good against the Falling sicknesse.

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CHAP. XXXII.

Water of Flower.

The greater quantity.

Take strong Proof spirit what sufficeth, and put it into a wide mouthed Pot, (or other Vessell) stopt very close; Take those severall flowers following in their seasons, and being clean pickt, put them to the spirit in the Pot, viz. Cowslips, Woodbine, Stock gillyflower of all three sorts,

Damask }
Musk } Roses,

Sweet Brier flowers, Clove July flowers, Lillium Convallim,
Jasmine, Citron }
Orange } flowers, or pils dry,

Tillia Flowers,

Garden }

Limon } Thyme flowers,

Wild }

Lavender }

Marigold }

Chamomile } Flowers, of each half a pound,

Mellilot }

Elder }

Being furnished with all your flowers as above, when you would distill them, adde to them Aniseeds 2 pound, Coriander 1 pound, bruise the seeds, It were best to bruise all the flowers, as you put them up into the spirit, for their more orderly working, distil them into strong Proof spirit according to Art, then adde to the distilled water Roses, July flowers, Elder flowers of each 1 pound, after twelve dayes infusion it may be drawn off; then dulcifie it with white Sugar 10 pound, and being fine it may be drawn for use.

The lesser quantity.

Take strong Proof spirit, 1 gallon; and put it into a wide mouthed pot (or other vessel) stopt very close; take those severall flowers following in their seasons, and being clean pickt, put them to the spirit in the pot: viz. Cowslips, Woodbine, Stock Gilly flower of the 3 sorts,

Damask }
Musk } Roses,

Sweet Brier flowers, Clove July flowers, Liliū Convallium, Jasmine, Citron } flowers, or pills dry,
Orange }

Tillia flowers,

Garden }
Limon } Thyme flowers,
Wild }

Lavender }
Marigold }
Chamomile } Flowers, of each 6 drams and a half,
Mellilot }
Elder }

Being furnished with all your flowers as above, when you would distil them, adde to them Aniseeds 3 ounces a dram and half, Coriander 1 ounce 5 drams, bruise the seeds, it were best to bruise all the flowers, as you put them up into the spirit, for their more orderly working, distil them into strong Proof spirit according to Art; Then adde to the distilled water Roses, July flowers, Elder flowers, of each 1 ounce 5 drams, after 12 dayes infusion it may be drawn off; then dulcifie it with white Sugar 1 pound, and being fine it may be drawn for use.

CHAP. XXXIII.

Water of Fruits.

The greater quantity.

Take strong Proof spirit 10 gallons, Juniper berries 4 pound,

H b

Quince

Quince } parings dry, of each 2 pound,
 Pipping }
 Limon pils, Orange pils dry, of each 1 pound, Nutmegs four
 ounces, Aniseeds 2 pound, Cloves 2 ounces, distil them into
 Proof spirit according to Art, to the spirit add Straw-
 berries, Raspises bruised, of each 5 pound, stir them well to-
 gether, and after ten dayes it being clear, may be drawn off;
 then dulcifie with syrup made as is hereafter taught, and so
 let it stand till it be clear, and then draw it off for use.

The lesser quantity.

Take strong Proof spirit 1 gallon, Juniper berries 6 ounces
 3 drams and a quarter,

Quince } parings dry, of each 3 ounces a dram and half,
 Pipping }
 Limon pils, Orange pils dry, of each 1 ounce 5 drams, Nut-
 meg 3 drams and a quarter, Aniseeds 3 ounces a dram and
 half, Cloves 1 dram and a half, distil them into Proof spirit
 according to Art, to the spirit adde Strawberries, Raspises
 bruised of each 8 ounces, stir them well together, and after
 10 dayes, it being clear, may be drawn off, then dulcifie it
 with syrup made as is hereafter taught, and so let it stand till
 it be clear, and then draw it off for use.

CHAP. XXXIV.

*Avens Water.**The greater quantity.*

Take strong Proof spirit what sufficeth, Avens roots 4 pound,
 Orris roots, Nutmeg Yellow Sanders, Mace, of each 2 ounces,
 Lignum Rhodium, Saffron, Storax, Benjamine, of each 1 ounce,
 Angelica roots 3 ounces, Limon pils green half a pound,
 Sweet Fennell seed, Aniseeds, of each 1 pound, Cloves 10 drams,
 Roman Wormwood, Mint dry, of each 3 handfuls, Red
 Roses,

Roses, Stœchas flowers, of each 4 handfuls, Sweet Marjoram Balm, Burnet, Thyme, all dry of each 6 handfuls, Alkerm berries 2 ounces, Bruise them all that are to be bruised, distill them into Proof spirit according to Art, dulcifie with Syrup thus made; Take Rose water 4 pound, white sugar 10 pound, boile it to a Syrup hight, then strain it, and put it to the fire again, adde thereto confectiō of Alkerm 4 ounces, Syrup of Gilly flowers 1 pound, Ambergreese (dissolved in Rose water) 1 dram; and so let these boil a little, till they be incorporated with the Syrup, and so keep it for use.

The lesser quantity.

Take strong Proof spirit 1 gal. Avens roots 6 ounces 3 drams and a quarter, Orris roots, Nutmeg Yellow Sanders, Mace of each a dram and half, Lignum Rhodium, Saffron, Storax, Benjamine of each 3 quarters of a dram, Angelica roots 2 drams and a half, Limon pills green 6 drams and a half, Sweet Fennell seeds, Aniseeds, of each 1 ounce 5 drams, Cloves 1 dram, Roman Wormwood, Mint dry, of each what sufficeth, Red Roses, Stœchas flowers, of each what sufficeth, Sweet Marjoram, Balm, Barnet, Thyme, all dry, of each what sufficeth, Alkermes berries a dram and half, Bruise them all that are to be bruised, distill them into Proof spirit according to Art, dulcifie with Syrup thus made; Take Rose water 6 ounces 3 drams and quarter White Sugar 1 pound, boile it to a Syrup hight, then strain it, and put it to the fire again, add thereto Confection of Alkerm 3 drams and a half, Syrup of Gilly flowers 1 ounce 5 drams, Ambergreese (dissolved in Rose water) 6 grains; and so let these boil a little, till they be incorporated with the Syrup, and so keep it for use.

Avens water is a great Cordiall, strengtheneth the Spirit, comforteth all the inward parts, and preserveth from Consumptions, and Mesadnesse.



Additions to enrich these precedent Chapters, to which (by Numbers) these are referred.

Additions to the first and second Chapters.

Take July flowers, Roses, Poppy. and Sanders, or any of them severally, what sufficeth; and infuse them in Aqua vitæ, or Proof spirit, till the tincture be drawn out; then draw off the spirit, and reserve it (close stopp'd) for use. When you have occasion to use it, take 8 ounces thereof to 7 pound and a half of this water, and you will give it a sufficient colour, or you may take more at pleasure without inconveniency.

Additions to the third Chapter.

The greater quantity.

Take Aniseeds, }
 White Sugar, } of each five pound, or what sufficeth.
 according to Art.

The lesser quantity.

Take Aniseeds, }
 White Sugar, } 8 ounces.
 according to Art.

Additions

Additions to the fourth Chapter.

The greater quantity.

Take Caraway seeds, Coriander seeds, of each 3 ounces, Calamus Aromaticus, Zedoary, of each 4 ounces, Aniseeds, Cassia lignea, of each 8 ounces, Angelica Rootes 8 ounces, (or Hearb Angelica 2 pound) white Sugar 2 pound and half, or what sufficeth.

The lesser quantity.

Take Caroway seeds, Coriander seeds, of each 2 drams and a half, Calamus Aromaticus, Zedoary, of each 3 drams and 3 quarters, Aniseeds, Cassia lignea, of each 6 drams and a half, Angelica roots 6 drams and a half, or Hearb Angelica 3 ounces a dram and half, White Sugar 4 ounces, or what sufficeth.

Additions to the fifth Chapter.

The greater quantity.

Take Cinamon, Cubebs of each 4 ounces, Sweet Fennell seeds, Aniseeds of each 8 ounces, Cloves, Caraway seeds, Nutmegs, of each 3 ounces, Wormwood dry 10 ounces, White Sugar, 2 pound and a half, (or what sufficeth).

The lesser quantity.

Take Cinamon, Cubebs, of each three drams and a quarter, Sweet Fennel seeds, Aniseeds, of each 6 drams and a half, Cloves, Caraway seeds, Nutmegs, of each 2 drams and a half, Wormwood dry 1 ounce, white Sugar 4 ounces, (or what sufficeth.)

Additions to the sixth Chapter.*The greater quantity.*

Take Garden Thyme, Penny royall, of each 3 handfuls, Cardamunis 2 ounces, Sweet Fennell seeds, Aniseeds, of each eight ounces, Balm dry 1 pound, Nutmeg, Ginger, Calamus Aromaticus, Galingale, Cinamon, of each 4 ounces.

The lesser quantity.

Take Garden Thym, Penny royall, of each what sufficeth, Cardamums a dram and half, Sweet Fennell seeds, Aniseeds, of each 6 drams and an half, Balm dry 1 ounce 4 drams, Nutmeg, Ginger, Calamus Aromaticus, Galingale, Cinamon, of each 3 drams and a quarter.

Additions to the seventh Chapter.*The greater quantity.*

Take Spear Mint dry, Aniseeds, of each one pound, Calamus Aromaticus 4 ounces, White Sugar 2 pound and a half.

The lesser quantity.

Take Spear Mint dry, Aniseeds, of each 1 ounce 5 drams, Calamus Aromaticus 3 drams and a quarter, White Sugar 4 ounces.

Additions to the eight Chapter.*The greater quantity.*

Take Sweet Fennell seeds, Cinamon, of each 8 ounces, Aniseeds,

Aniseeds, Rosemary dry of each 1 pound, Caraway 2 ounces, Spear Mint dry, 2 handfuls, White Sugar 2 pound and a half.

The lesser quantity.

Take Sweet Fennell seeds, Cinamon of each 6 drams and a half, Aniseeds, Rosemary dry, of each 1 ounce five drams, Caraway 1 dram and a half, Spear Mint dry what sufficeth, White Sugar 4 ounces.

Additions to the ninth Chapter.

The greater quantity.

Take Caraway seeds 4 ounces, Aniseeds, Limon pills dry, of each 1 pound, White Sugar 2 pound and a half, in like manner and quantity make your Composition, with Orange pills dry according to Art.

The lesser quantity.

Take Caraway seeds 3 drams and 3 quarters, Aniseeds, Limon pills dry, of each 1 ounce 5 drams, White Sugar 4 ounces, In like manner and quantity make your Composition with Orange pills dry according to Art.

Additions to the twelfth Chapter.

The greater quantity.

Take Cinamon 5 ounces, Cloves 2 ounces, Limon pills dry 3 ounces, Sugar 2 pound and a half.

The lesser quantity.

Take Cinamon half an ounce, Cloves a dram and halfe, Limon pills dry, 2 drams and a half, Sugar 4 ounces.

Addition

Addition to the fourteenth Chapter.

The greater quantity.

Take Sweet Fennell, Cinamon, of each 5 ounces, Nutmeg 3 ounces, Sugar 2 pound and a half.

The lesser quantity.

Take Sweet Fennell, Cinamon, of each 4 drams, Nutmegs 2 drams and a half, Sugar 4 ounces.

Additions to the fifteenth Chapter.

Take and adde to the spirit half as much as the rule of every particular Ingredient therein expressed, and in stead of Sanders give it the tincture of Roses, July flowers, or Poppy, what sufficeth according to Art.

Additions to the eighteenth Chapter.

The greater quantity.

Take Musk, Ambergreese, of each half a dram, White Sugar candy in stead of common white Sugar, what sufficeth according to Art. In respect that Musk in some cause, may give offence to the receiver: it is requisite to omit the use there of in some of your water of this kind, to serve for such speciall uses.

The lesser quantity.

Take Musk, Ambergreese of each 3 grains, White Sugar Candy in stead of Common white Sugar, what sufficeth according to Art. In respect that Musk for some causes may give offence to the receiver, it is requisite to omit the use thereof

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in some of your water of this kind to serve for such speciall uses.

Additions to the nineteenth Chapter.

The greater quantity.

Take Sweet Fennell seeds 5 pound, Caraway seeds four ounces, Aniseeds 1 pound, Cinamon eight ounces, Cloves 2 ounces, Sugar 2 pound and a half.

The lesser quantity.

Take Sweet Fennell seeds 8 ounces, Caraway seeds three drams and a quarter, Aniseeds 1 ounce 5 drams, Cinamon 6 drams and a half, Cloves a dram and half, Sugar 4 ounces.

Additions to the twentieth Chapter.

The greater quantity.

Take Cinamon, Sweet Fennell of each 5 ounces, Caraway, Cloves of each 2 ounces, Marigolds 2 gallons, Sugar 2 pound and a half.

The lesser quantity.

Take Cinamon, Sweet Fennell, of each 4 drams, Caraway, Cloves of each a dram and half, Marigolds what sufficeth, Sugar 4 ounces.

Additions to the twenty third Chapter.

The Syrup for dulcifying the water is thus to be made.

Take Apricots, Quinces, Cherries, English Currants, of each

The Distiller of London.

each what sufficeth, all full ripe, and of equall weight, when they are thus prepared as followeth;

Prepare the Quinces and Apricots, and take out the stones and kernels, and slice them very thin, stone the Cherries and bruise them and the Currants; then lay them into a flat Bason or Pan thus: a lane of fruit of a fingers thicknesse, and then a lane of White powder Sugar of like thicknesse; and so proceed in order lane upon lane till all be laid into the Bason: then poure on good *Aqua vite* gently, till all be covered therewith; and so let it stand 2 houres; then bruise or posh them all together, and presse out the juice as dry as possibly you can through a thick linnen bag: Then take the juice, and let it stand till it be setled clear, which juice by a gentle exhalation in a hot bath, boyl up to a Syrup hight according to Art, and keep it for use. To every eight pound of the Spirit, put a pound of this Syrup, and when it is clear draw it off for use.



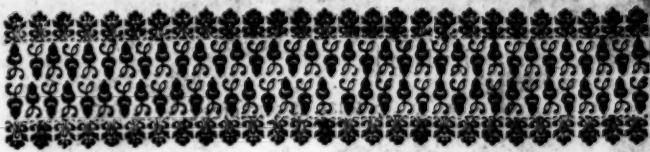
The Furnace used in the drawing of the preceding Spirits and waters.

A, Sheweth the bottom which ought to be of Copper.

C, The barrell filled with cold water to refrigerate and condense the water and oyle that run through it.

D, A pipe of brasse or pewter, or rather a worm of Tin running through the barrell.

E, The Alembick set in the furnace with the fire under it.



Excellent Waters for severall uses.

CHAP. I.

A water to cause Hair fallen to grow again.

TAKE Mountain Hysop, Mountain Calamint, leaves of Southernwood, of each two handfals,

Canary Wine

Urine

Hony

Milk

} of each two pound.

Mustard seed half a ponud, bruise what is to be bruised, Macerate them three dayes, then distil them in *Balneo*.

CHAP. II.

A water to cause hair taken off never to grow again.

Take seeds of Henbane bruised 2 pound, lay it a while in some moist place, then adde great stone-crop half a pound, distil it according to Art.

Excellent Waters for severall uses.

Another.

Take bloud of Frogs

Terræ Sigillatæ

Stomach

Rosæ

Sorrell

Houfleeke

} what is sufficient.

Macerate them together 24 houres, then distill them in Balnea.

CHAP. III.

A water to take away spots in the Face.

Take Asses Milk four pound, White wine 1 pound, the inside of two new loaves, 12 Egges with the shells, Sugar-Candy 3 drams, Mix them well together and distill them.

CHAP. IV.

A water against Soabs.

Take Sorrell water 2 pound, Juice of Plaintane, Rose water, of each 4 ounces, Juice of Limons 2 ounces, Lytharge 6 ounces, Ceruse, Sublimate, of each half an ounce, Sulphure vive 3 drams, bruiſe them that are to be bruiſed; then infuse them 24 houres, and after distill them according to Art.

CHAP.

CHAP. V.

A water to preserve the Sight.

Take Fennell	} of each three handfuls.
Vervains	
Eye-bright	
Endive	
Betonies	
Red Roses	
Venus Hair	

Bruise the Hearbs and macerate them 24 houres in white wine, (as much as is sufficient) then distil them in a limbeck in Balneo.

Another.

Take Fennell	} of each equall parts.
Celandine	
Sage	
Rosemary	
Vervain	
Rue	

Prepare as it before.

CHAP. VI.

A water to restore the sight decayed.

Take Fennell	} of each one handfull.
Celandine	
Vervaine	
Rue	
Leaves of Enula	
Fullers Teesell	
Milfoile	
Camphire half a dram.	

Bruise them and distil them in an Alembick.

CHAP. VII.

A water against the Gout.

Take Licorice half a pound, Aniseeds 1 pound, Cinamon
3 ounces, Galingale

Ginger

Roots of Iroes

Enula Campana

Seeds of Fennell

Caraway

Amomum

Anmi

Piony

Basil

Savory

Marjoram

} of each one ounce.

Juniper Berries 2 ounces, Ground Ivie half a handfull, Long
Pepper, Calamus, Spikenard, Mace, of each 3 drams, Valeri-
an 1 dram, Roots of Angelica half an ounce, Cyprus 4 ounces,
Lignum Aloes half an ounce, Sugar 4 ounces, Maliga Wine,
or strong Ale 32 pound, Prepare and distil them according
to Art.

*This water taken inwardly strengthens cold and weak Stomachs and
breaks the Stone.*

*Outwardly applyed it easeth the Gout, enlargeth Sinews that are shrunk,
and is good against all aches and passion proceeding from melancholy and
cold.*

CHAP. VIII.

A Water for the Web and spots in the Eyes.

Take Rue

Plantaine

Red roses

Red Poppies

Vervaine

Celandine leaves

} of each 1 ounce.

Red

Red rose water 1 pound, Rich white wine 1 pound and an half,
Tutia prepared 1 dram, Aloes Hepatick an ounce and a half,
Cloves 1 ounce, Powder, prepare and distil them according to
Art. Drop the water into the Eyes morning and evening.

CHAP. IX.

A water for Tettors, Fistulas, Cankers, &c.

Take strong white Wine Vinegar 8 pound, Wood Ashes 1
pound, Infuse them 3 dayes naturall, and stir them twice a
day, then put thereto unslaked lime 1 pound, let it stand o-
ther three dayes, and stir it as before, when it is well settled, Fil-
tre off the clear Lee, and put thereto

Sal Gemme	}	of each one dram.
Salt Alkali		
Salis Vixæ		
Salt Armoniac		
Salt of Tartar	}	

Calx of Egge shels, and Calx vive, of each 1 dram, Grind all
these together, and temper them with the said Lee; put them
into a Glasse Iembick and distil them in *Balneo*; give it the first
24 houres no more heat then will make it, and keep it warm:
after that distil it off according to Art.

CHAP. X.

A water against rednesse of the Face and to beautifie the Skin.

Take Wild Purflaine

Mallows

Nightshade

Plantain with the seeds

} of each three handfulls.

The Whites of 12 Egges, Limons number 12, Roch Allum, 4
ounces, prepair and distil them according to Art.

Ans.

Another.

Take Calx of Egge shels, White Corall pulverized, of each 2 ounces, Salt calcinated, and Borax, of each 6 ounces, Gum Tragagant 5 ounces, Roots of white Lillies, number 6, White Sope 8 pound, Styra, Calamita, Belzoin, of each 4 ounces, Mix and distil them by Alembick.

Another of the same vertue.

Take Wine Vinegar halfa pound, Lytharge of gold 1 ounce and a half, Ceruse 1 ounce, Sal Gem 6 drams, Roch Alum half an ounce, Borax, Sulphure vive, Salt Nitre, of each three drams, Camphire half a dram, prepare and distil them according to Art.

C H A P. X I.

A water against the inordinate Flux of Teares.

Take ripe Strawberries as many as you please, set them to digest in Horse dung 15 dayes, then distil them in Balneo.

Or thus,

Take Flowers of the white Thorn, Leaves or tops of the Willow, Eye-bright, of each what sufficeth, distil them as before.

C H A P. X I I.

A water against rednesse of the Eyes.

Take juice of Celandine

Rue

Vervaine

Fennel

} of each three ounces.

Tops

Excellent Waters for severall uses.

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Tops and leaves of Roses of each what sufficeth, Sugar Candy 3 ounces, of the best Tutia }
Sanguis Draconis } of each four ounces.

Bruise them that are to be bruised, and distil them according to Art.

CHAP. XIII.

A Water to cleanse and dry a sharp Ulcer.

Take Crude Allum 2 ounces, white of Egges, number 15.

Juice of Purslaine	} of each 4 ounces.
Plantaine	
Nightshade	
Nicotian	
Houseleek	
Water of Meadsweet	}
Trinity grasse	
Roses	}

Labour them well together and draw off the Water by an Alembick of Glasse in Balneo.

CHAP. XIV.

A water to make the Teeth white.

Take Allum 6 ounces, Common Salt 3 ounces,

Myrrhe	} of each 6 drams.
Mastick	
Cloves	

Mix, bruise and distil them according to Art.

K k

CHAP.

CHAP. XV.

A Water to take away the marks of the Small Pox.

Take Mastick

Myrrhe

Aloes Hepatick

Nard

Sanguis Draconis

Olibanum

Opopanax

Bdellium

Carpobalsamum

Saffron

Gum Arabick

Liquid Storax

} of each 2 drams and a handful

Beat what is to be beaten, then adde thereto of clear Turpentine equall weight : distil them according to Art.

CHAP. XVI.

A Water to Cicatrize Ulcers.

Take red Wine 2 pound, Plantainewater half a pound, Rose water four ounces,

Juice of Plantaine

Vervaine

Shepherds Purse

Knotgrasse

Centaury the lesse

Comfery the greater and lesser

} of each 2 ounces.

Crude Allum 1 pound, Cypress Nuts 3 ounces, Pomgranate flowers half an ounce, Pomgranate pils 3 ounces, Gals half an ounce, Bark of the Oak, Sumach, of each five drams, Turpentine

Excellent waters for severall uses.

pentite 3 ounces, Crude Honey half a pound, Mastick, Olibanum, of each ten drams, Sarcocoll 2 ounces, Burnt Vitriol, Burnt lead, of each 1 dram, Bole Armoniaek 3 ounces, Cassia lignea half an ounce, Round Birtwort 3 ounces.

Powder what is to be powdred, then mix and distil them.

Another.

Take Mastick
Myrrhe
Olibanum
Sarcocoll
Mummie

} of each 3 drams,

Frankincense 1 ounce,

Nutmegs

Cinamon

Cloves

Cubebs

} of each 2 drams.

Cyprus Nuts half an ounce.

Flowers

Barkes } of Pomgranates, of each 1 dram.

Bole Armoniaek 1 ounce, Sanguis Draconis half an ounce, Red Roses 3 drams, Roch Allum 1 pound, Vitriol 7 drams, Clarified Honey 1 ounce, Aqua vitæ a pound and half, White Wine 1 pound, Juice of Plantaine

Nightshade

Comfery of the greater and lesser

} of each 4 ounces,

Water wherein iron hath been quenched 4 pound, Powder what is to be powdred; and infuse them all night in *Aqua vitæ*, in the morning draw forth the water by Alembick.

CHAP. XVII.

A Water for Ulcers.

Take White Wine 4 pound, Plantain water 2 pound, Allum

Excellent Waters for severall uses.

half a pound, White Copperas 5 ounces, Crude Honey 1 pound, Licorice Rasped 1 pound, Bole Armoniack 5 ounces, Camphire an ounce and half, Mercury sublimated 2 drams, Bruise what is to be bruised, and distil them by Alembick.

CHAP. XVIII.

A Water for hollow Ulcers.

Take Fountaine water, Red Wine, of each 2 pound and a half, Red Roses four ounces;

Flowers } of Pomgranates, of each 2 ounces and a half.
Rindes }

Sumach 2 ounces

Sage a handfull

Comsery the greater and lesser of each half a handfull.

Sarcocoll 3 ounces, Mastick 2 ounces, Olibanum 1 ounce, Honey 1 pound, water of Turpentine a pound and a half, bruise what is to be bruised, and distil them through a lembick of Glasse with a gentle fire.

CHAP. XIX.

A Cistritzing Water.

Take water wherein Iron hath been quenched four pound, Aqua Balsami veri four pound, Turpentine a pound and half, Crude Honey 1 pound, Allum 10 ounces, white Copperas five ounces, Bole Armoniack 7 ounces, Mercury sublimated half a dram, leaves of Plantain, Comsery the greater, middle and lesser, Teasill, Knotgrasse, St. Johns Wort, of each a handfull and a half, Frankincense 2 ounces, Olibanum, White Sanders, of each half an ounce, Red Roses, a handfull and a half, Cassia Lignea, Cinamon, of each 3 drams; for the first distillation;

lation; then take Turpentine 1 pound, Mastick 3 drams, pure Rozen 6 ounces, Cinamon, Cloves, of each 2 drams; Pomgranate rinds half an ounce, Cyprus Nuts 1 ounce and a half, White Copperas two ounces, Allum 3 ounces, Olibanum 4 ounces, *Sanguis draconis* an ounce and a half, *Aqua Balsam. veri* 1 pound for the second distillation: Afterwards,

Take Flowers of St. Johns Wort, Sage, Rosemary, Carduus Benedictus, Centaury, of each 1 ounce, Mastick, Red Sanders, of each 3 drams, Wood of Aloes 2 scruples, Cubebs one dram, Aqua vitæ half a pound, Burnt Allum, White Tartar, of each an ounce and a half, Myrrhe half an ounce, Earth Wormes in powder 1 dram, the middle Bark of the Oak 6 ounces, Cassia lignea three drams, White Copperas 1 ounce, Rindes of Pomgranates half an ounce, Cinamon 2 drams, Flowers of Pomgranates 1 dram, Guaiacum four ounces, Carpopalsamum, Xylobalsamum, of each 1 dram, Myrtles, Mummie, of each 2 drams, Borax half an ounce, Cloves 2 drams,

Tormentill

Gentian

Round Birt-wort

} of each 2 drams and a half,

This is for the last distillation, afterwards adde

Burnt Allum half an ounce, White Copperas 2 drams, Mastick 1 ounce in fine powder, and then keep it for use.

CHAP. XX.

A water for hollow Wounds:

Take Fountain water, Red Wine, of each 2 ounces & an half, Red Roses 4 ounces, Pomgranate flowers, Pomgranate rindes, of each 2 ounces and a half, Sumach 2 ounces, Sage 1 handfull, both the Coniferies, of each a handfull, Allum half a pound, Sarcocoll 3 ounces, Mastick 2 ounces, Olibanum 1 ounce, Honey 1 pound, water of Turpentine a pound and a half.

Prepare the Ingredients according to Art, and then distil them all to gether in a glasse lembick with a gentle fire.

CHAP. XXI.

A water for Wounds and Ulcers.

Take Calx vive extinct in Fountain water 8 pound, Plantain water four ounces, Rose water 2 pound.

Heat all these together, afterward let them stand and clear, pour forth all the clear to the lembick, and put to it Honey 2 pound, Allum 1 ounce,

Borax }
Mastick } of each three ounces.

Olitanum four ounces, the middle Bark of the Oak dried 3 ounces, powder what is to be powdred, and distil them according to Art.

CHAP. XXII.

A water to make the Teeth white.

Take the first distilled water of Honey which is white, one pound, Allum half a pound,

Sal Nitre }
White Salt } of each one ounce.

Water of Lentisk leaves 1 pound, Mastick two ounces,

White Vineger }
White Wine } of each 2 ounces.

Mix and distil them according to Art, & reserve the water.

CHAP. XXIII.

A water against the Colick,

Take Muscadell, or Malmsey four pound, Nutmegs, Galls, of each 1 dram. Cina.

Cinamon
Cloves
Grains } of each two drams.

Powder the ingredients grossely, and infuse them in the wine 24 houres, then with a soft fire draw off the water according to Art.

C H A P. XXIV.

A water for a cold Stomach.

Take Citron and Orange pils dried, of each 2 ounces, Rosemary, Mints, of each one handfull.

Cinamon
Cloves
Cubeb
Cardamums
Nutmegs
Ginger } of each a dram and a half.

Sage, Pennyroyall, Thyme, of each one handfull,

Caraway seeds
Aniseeds
Fennell seeds } of each four drams.

Bruise what is to be bruised, and infuse them all the space of 24 houres in Canary wine four pints, then distil them in Balneo according to Art.

C H A P. XXV.

Water of Sage Compound.

Take Sage
Marjoram
Thyme
Lavender
Fennell seeds } of each 1 ounce.

Ci-

Excellent Waters for severall uses.

Gjaamon half an ounce,

Ireos
 Roots of Cyprus } of each 1 ounce.
 Calamus Aromaticus }

Storax, Benjamin, of each a dram and a half, Infuse them four dayes in four pound of spirit of Wine; then distil them in Balneo.

CHAP. XXVI.

Lavender water Compound.

Take flowers of Lavender, Lilly of the Valley, of each 24 handfulls, Piony

Tillia
 Flowers of Rosemary } of each half a handfull.

Sage
 Cinamon
 Ginger
 Cloves
 Cubebs
 Galingale
 Calamus Aromaticus
 Mace
 Messelto of the Oak } of each a dram and a half.

Piony roots one ounce and a half, of the best Wine what sufficeth, infuse them in the Wine two dayes, then distil them in Balneo Marie.

This water is good against the Falling sicknesse, Convulsion fits, and the infirmities of the Brain.

CHAP. XXVII.

A Peccorall Water.

Take the Liver of a Calf, the Lungs of a Fox, of each number 1,
 Liver-

Liverwort
 Longwort
 Sage
 Rue
 Hyssop
 Roots of Enula
 Gladiol
 Seeds of Anise
 Caraway
 Fennell

} of each one handfull.
 } of each half an ounce.
 } of each half an ounce.

Flowers of Borage and Buglosse, of each two drams; infuse them the space of 24 houres in rich old Wine what sufficeth. Water of Scabius

Carduus Benedi^{ctus}
 Hyssop 2 ounces; then distil it in *Balneo Mariae*.

} of each four ounces.

Another.

Take leaves of Scabius, Veronica, of each two handfulls,

Venus Hair
 Sage
 Hyssop
 Horehound
 Liverwort
 Licorice

} of each one handfull.

Flowers of Borage
 Buglosse
 Violets

} of each half a handfull.

Roots of Enula Campana
 Licorice

} of each half an ounce.

Flowers of Ireos
 Aniseeds
 Fennell seeds

} of each one dram.

Choyse Cinamon, orientall Saffron, of each half a dram, let them be bruised and cut, be digested in water of Scabius Veronica, of each one pound, water of Hyssop half a pound, white Wine 3 pound, let them digested two days be distilled in *Balneo Mariae*; adde Sugar Candy what sufficeth.

This water openeth the obstructions of the Liver and Lungs, and strengtheneth them.

CHAP. XXVIII.

Aqua Splenetica.

Take roots of Fern 2 ounces, roots of Parsley, Polypody, of each an ounce and a half, roots of Round Birt wort, Lovage, Calamus Aromaticus, Acorns of the water, of each 1 ounce, chosen Rubarb; barks of Tamarisk, Copperas, Ash, of each half an ounce,

Lovage	}	of each two drams.
Seeds of Caraway		
Cummin		
Anise		

Scolopendria, tops of Wormwood, Fumiterre, Dodder, leaves of Agrimony, Ceterach, of each a handfull and a half: Rich Wine 8 pound; let them be digested two dayes, and then distil them in *Balneo Mariae*.

This water strengtheneth the Spleen, openeth and provoketh Urine.

CHAP. XXIX.

Aqua Febrifuga.

Take roots of Vipers grass, Cinquefoil, Tormentill, Distammum, of each 6 drams, Seeds of Citron, excocticated, Carduus Benedictus, Carduus Maris, Sorrel, of each half an ounce, of all the Sanders of each 1 dram, of the Cordiall flowers of each 1 handfull, Obsts Rue one handfull, Harts Horn rasped half an ounce, pour upon them bruised water of Tormentill, Cychorie, Carduus Benedictus, Carduus Maris, Wild Poppy, of each what sufficeth; let them be macerated three dayes in a glasse close shut, afterward adde Citrons bruised number six, Juice of Endive, Carduus Benedictus, Plantain, of each one pound,

Excellent Waters for severall uses.

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pound, Borage, Scordium, of each half a pound; let them be distilled in *Baino Maria*.

This water is convenient in Fevers, especially malignant Fevers; because it driveth away the malignity, and resisteth putrefaction.

CHAP. XXX.

Aqua Damascena Odorifera.

Take Irees Flowers

Cloves

Cubebs

Ginamon

Grains of Paradise

Calamus Aromaticus

} of each one ounce.

Marjoram

Thyme

Bay leaves

Rosemary Flowers

Red Roses

} of each a handfull. }

Lavender flowers three drams, of the best Wine 3 measures; let them be macerated and distilled: to the distilled liquor add Musk half a scruple, Civet 6 grains.

This water heateth, dryeth, cutteth, dissolveth, and chiefly strengtheneth the Heart and Head.

CHAP. XXXI.

Aqua Hystrica.

Take roots of Dittamnum seeds of Daucus, of each one ounce, Cinamon, Cassia lignea, Balm, of each two scruples, Orientall Saffron 1 scruple, New Castorium 1 scruple and a half, of all these mixt make a powder, to which let be poured

L 1 2

water

water of Rue two pound and a half: let them stand in infusion on four dayes, and then distil them in *Balneo Maria*.

CHAP. XXXII.

Aqua Nephretica.

Take roots of Enula Camphana, Cammock, Pimpernell, Radish of each one ounce, Parsley, Lovage, of each 7 drams, leaves of Lovage, Parsley, of each one handfull, Saxifrage *cum toto* two ounces, Flowers of Broom, Balm, Rosemary, of each half a handfull, Elder one handfull, Berries of Juniper, Myrtle, Aleakengie, Aniseeds, of each 2 ounces, cut them and infuse them the space of 8 dayes in 12 pound of the best white Wine, then let them be distilled.

This water openeth and provoketh Urine : the dose is one spoonfull.

CHAP. XXXII.

Aqua Aperitiva.

Take roots of Eringo, Vipers gaffe, Fern, the greater Centaury, of each half an ounce roots of Fennell, Banks of Capparis, Tamarisk, Ath, of each three drams, Barks of Citrons two drams and a half; Seeds of Carduus Benedictus, Cichorie, of each half an ounce, Seeds of Endive, Cresses, Citrons, Scariol, of each two drams,

Polytricon
Adiantum
Ceterach
Dodder
Scolopendria
Betony
Endive

} of each a handfull and a half;

Tops

Tops of Thyme
Epithymum
Hops

Flowers of St. Johns Wort } of each 1 handfull.

Broome
Borage
Balm }

Small Raisins 1 ounce: Cinamon 1 dram, and a half, *Spec. Di-*
lacc. halt a dram,


Carduus Benedictus }
Water of Hops } of each one pound.
Scolopendria }
Pauls Betony }

Rhenish Wine two pound and a half, let them stand two days
in a warm place in a vessel close stopped: afterward distil them
in Balneo.

*This water openeth the obstructions of the whole body, but especially
of the Liver, Spleen, and Mesentery.*

FINIS.

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A Catalogue of the *Materials* and *Ingredients* used in the precedent Rules.

ROOTS.

A *Ngelica*
Avens
Burser-Bur
Calamus Aromaticus
Cyperus, long
Contra-yerva
Enula-campana
Galingal
Gentian
Ginger
Horse Radish
Imperitoria
Licorice
Lovage
Orris
Sassafras
Scordium
Snake-grasse
Valerian } *Common*
 } *Garden*
 } *Great*
Vincetoxicum
Zedoary

WOODS.

L *Ignum Rhodium*
Sanders } *Red*
 } *Yellow.*

BARKS and PILLS.

B *Ay-tree Roots*
Cassia Lignea
Cinamon } *Common*
 } *White*
Citron
Guaiacum
Limon
Orange
Pippins
Quinces
Sassafras.

HEARBS.

A *Ngelica*
Arsmart
Bay-leaves
Balm or Bawm
Burnet
Brooklime

Balsamin;

Balsamint or Costmary

Carduus Benedicinus

Chervile, sweet

Clary

Calamint

Cresses } Water
 } Garden
 } Winter
 } Bank

Costmary or Balsamint

Horeboud, white

Lavender leaves

Lavender Cotton

Mint } Speir
 } Red

Marjoram, Sommer.

Peny Royal

Rosemary

Rocket

Ros sol's

Rue

Sage } Red
 } Great

Scurvygrasse } Common
 } Garden

Stachados

Southernwood

Scordium

Thyme } Wilde
 } Garden
 } Limon

Tarragon

Trefoil, Water

Valerian, great

Wormwood } Common
 } Romane

FLOWERS.

Cowslip
Citron

Camomile

Elder

Gilliflowers, Clove

Gilliflowers, Stock, three sorts

Jasmine

Lavender

Lilium Convallium

Marygold

Melilot

Orange

Poppy, Red

Roses } Red
 } Damask
 } Musk
 } Bryer

Saffron

Sage

Stachas

Tillia or Lindextree

Thyme } Garden
 } Limon
 } Wilde

Woodbine (or Honey-suckle.)

SEEDS.

Anise
Angelica

Basil

Caraway

Cardamums

Cresse, Bank

Chervile, sweet

Coriander

Cummin

Cummin
 Fennel, sweet
 Grains of Paradise
 Mustard
 Radish
 Rocket
 Scumy-grasse Garden
 Wormwood, common.

FRUITS.

A Prickles
 Alkermes Berries
 Barley, Maulted
 Barley, Maulted
 Cardamums
 Cherries
 Currans } Forain
 } English
 Cubebs
 Cloves
 Grapes
 Hops
 Juniper Berries
 Maces
 Nutmegs
 Pepper } White
 } Long
 Quinces
 Raspis, Red
 Raisins, sol.
 Strawberries
 Saffron

Walnuts green with husks
 Zedoary.

JUICES.

L Imms
 Walnuts green with the Husks

Others of divers kinds.

A Mbergreese
 Allum
 Benjamin
 Camphire
 Confection of Alkermes
 Mithridate
 Musk
 Treacle, Venice
 Syrup of Gilliflowers
 Storax
 Sugar of divers sorts.


Liquid Materials.

W Ines of all kinds
 Beer and Ale
 After-Worts, or Wash
 Sugar-Waters
 Tilts, Dregs, Lees, or Grounds of
 Beer or Ale.
 Lees of Wines
 Spirits of Wine
 Rose-water.

FINIS.

An Alphabetical Table of all the Oils,
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